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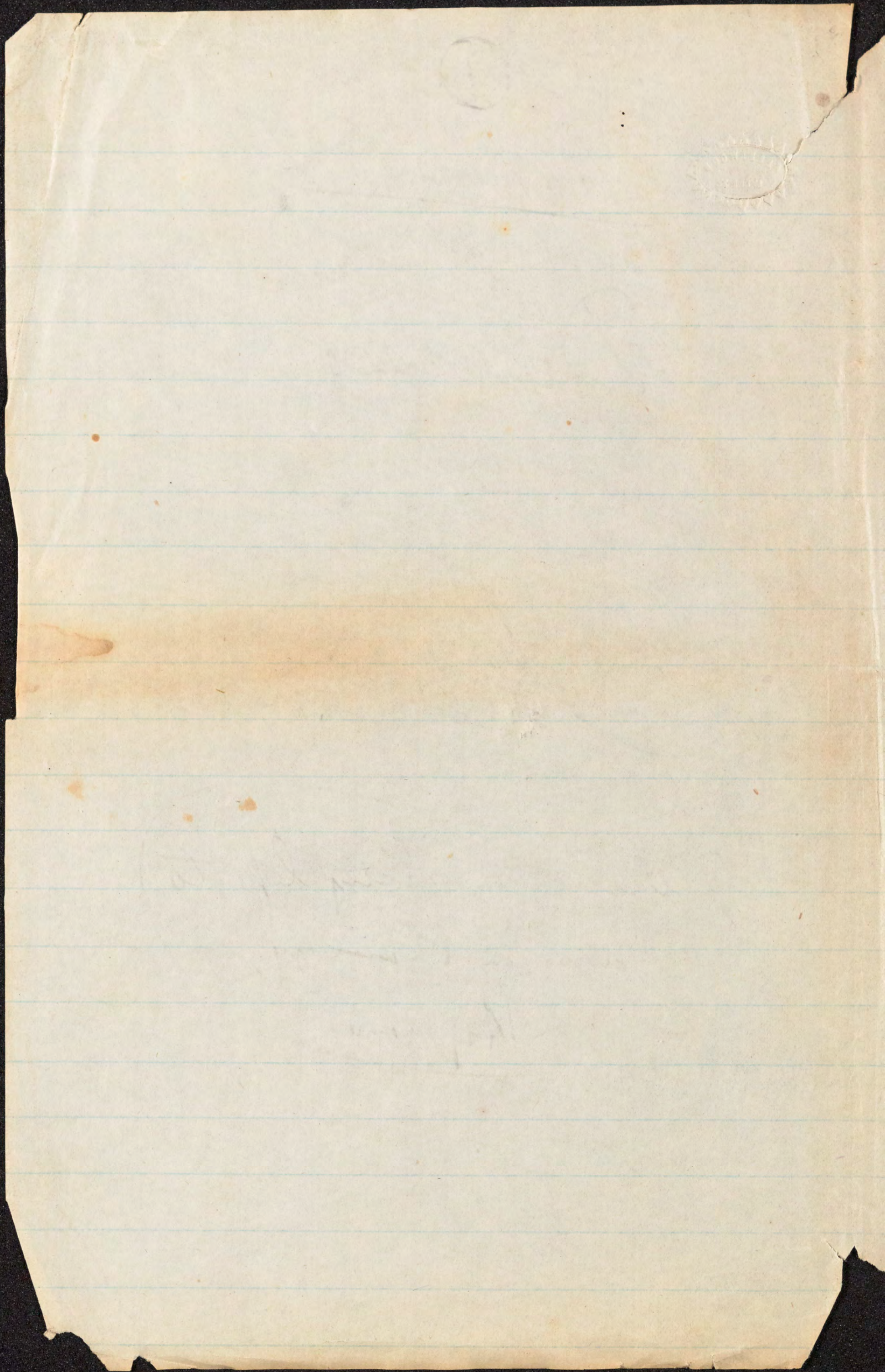
Hygiene &

Diseases

of

Children.

Alimentation mostly left to
Course on Physiology
& Hygiene.



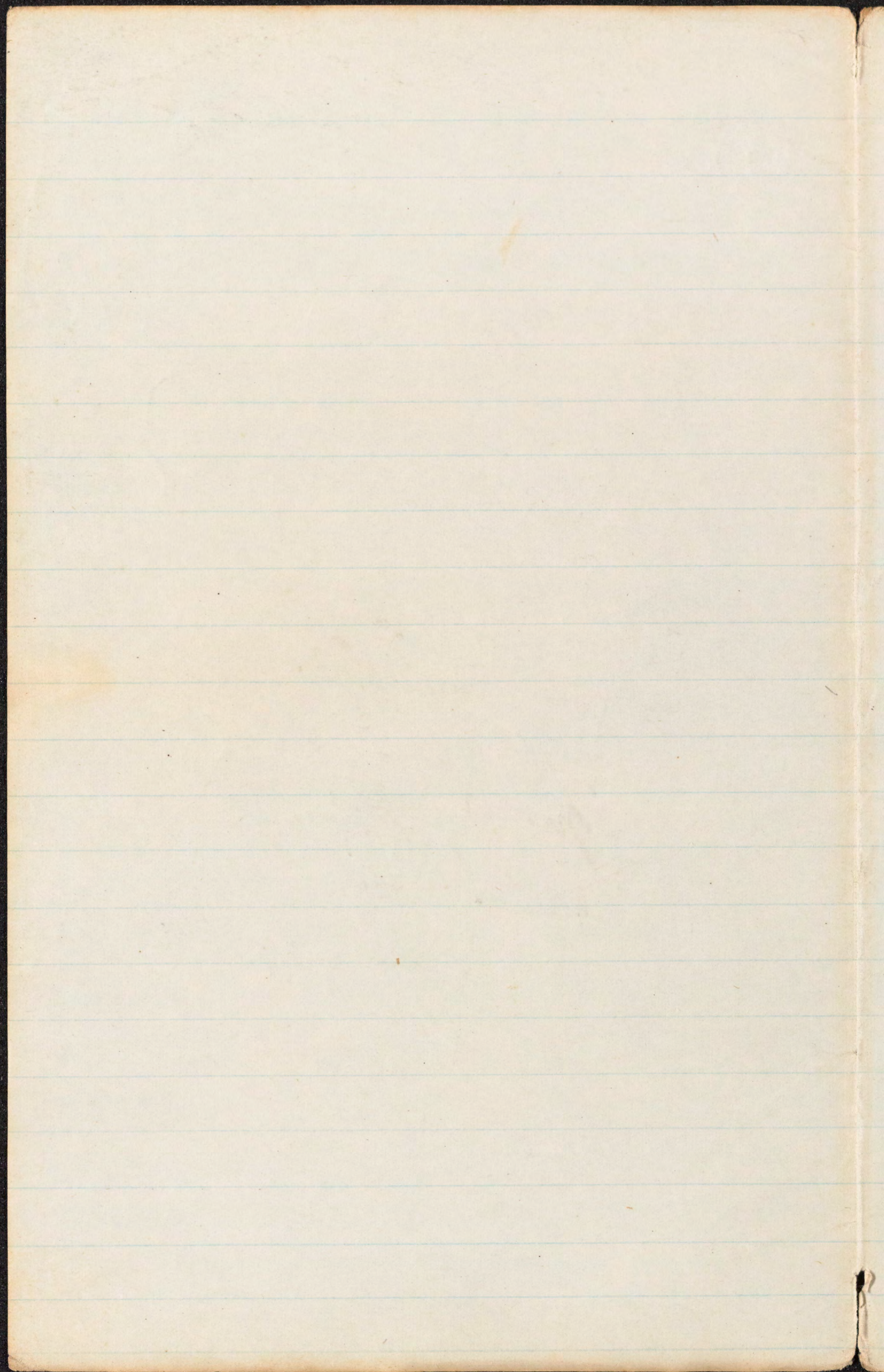
C.

(2)

Symptomatology &

Physical Diagnosis

of Children.



1. ~~Constitutional~~ (Fear & fright) 2. Heavy & slight gymn. in education - D.S. West
 Regard for health at schooling age - what is a good schooling age -
 How many hours daily? 1 or 2? - Blocks at home!

3. Symptomatology & Physical Diagnosis

in Children.
 (after J. T. Murr)

See
 note of
 Friedlander's
 Table
 over.

Difficult -

1. Can't tell about ~~themselves~~ -
 or, if older, not intelligibly -

2. Frightened -
 after 8 or 10 - often well enough.
 3. Mothers and nurses often inaccurate -

physicians.
 Some give it up; but or ~~not~~ or routine.
 Delicate as match-makers - Some

amiable
 Surprises in unexpected recoveries - & some painful
 Unexplained disappointments.

Yet - not all uncertainty.

Patient care discerns and skill can
 often do much.

To induce a child to remain quiet

During the visit & inspection of the
Physician is one of the problems of
the daily
Practical of midwifery, In that,
your sex, by its gentleness & superior
natural tact, must undoubtedly always
have the advantage.

I suppose that children
new be afraid
of lady doctors
Gradual ^{man perhaps} approach ^{as sapping & mining a fortress}

soft voice — amusing attention —
management generally —

Examine

Asleep, if possible.

Don't let her wake it up if asleep.

next best, nursing at the breast

Pulse, breathing, countenance, state of abdomen,
after very different waking & asleep in a child.

But, ~~first~~ usually, if you can,
 begin outside of the chamber, at the
 visit, with careful inquiry into the
history of the case — of the child.
Parentage — health of parents (most
 important in child, as near source of
inheritance) —

If child beyond infancy, was it raised at
 breast, or by hand? weaned early, or late?
 Ever sick before? How? — when?
 How long?
 When first sick this time? In what
 way?

Not leading questions, when avoidable.

Repeat careful inquiries of between history, each visit.

Weigh mothers or nurse's accounts (4
 with allowance & discrimination; But
 don't lightly set aside a mother's
 —————

Perceptions or strong convictions.
Know, if you can, the mother's bias - toward anxiety or re.
sleep - taking food - crying -

stomach — bowels — most universal questions.

Examination: — (~~Hemiphere~~; ~~the~~ AA) ^{L3}

See next paper

See next page
Countenance: - expression; color; wasting; furrows;
twistings; - alae nasi, mouth; strabismus!
~~no motion!~~

Cry: pain, distress, excitement; - hoarse, or
whistling!

Sleep : - stupor ; apathy ;

Body; round (plump, or shrunken thin;
about ~~five~~ ^{four} inches.

Body; round of ~~about~~ ^{about} ~~fever~~ ^{fever} Dry or moist
Skin; color, — temperature — Swellings —
eruptions ~~the~~ [^]

~~Review~~ In the inspection of every case of disease, in a child especially, we are to observe

1. The Countenance — its expression, color, & whole appearance —
2. The Cry — its character —
3. Sleep, or its absence — or stupor or apathy.
4. The State of the body — round & plump, or wasted &c —
5. The Skin — its color, temperature, dryness or moisture, — eruptions, swellings &c all other phenomena of the surface —
6. The pulse & action of the heart —
7. Respiration — their rate & character —
8. Physical signs of the great cavities —
9. Everything else observable or discernable.

→ Now p. (5

7
10th Lecture

On -

Hygienic Medical

Management of
Children -

W. M. C.

1868 - 9.

← To review these more particularly: (5)

1/1 of face -

^{crow's}
^{feeling} ^{eyes} expression of upper part
most changed in diseases of brain -
middle in thoracic (nostrils) - lower
part (mouth) in abdominal.

Dr M. Hall - pain in head -

contracted brow - in chest, sharp

nostrils - in abdomen, elevation of upper lip,

(retraction of corners of mouth)
~~Difficulty of breathing leads to expansion of the nostrils, but~~
~~this is not often conspicuous in a child.~~

Color of face; in all fevers &

inflamm. after, red, unless ^{the attack be} so

soon as to exhaust a great deal

press: - then pale - ash-colored

a white - In chronic ^{affections,} often

the latter - ^{the latter} - last stage of acute - e.g., croup - cholera infantum -

Ray of nostrils is oppressed

breathly as pneumonia, bronchitis (pleurisy?)
Look into nostrils / discharges or
accumulations.

^{referring to}
it is natural to sleep as well usually, -
~~cannot be helped~~ -

As to Sleep, a little will

make an infant wakeful: - Teething

e.g. - Uneasy sleep quite common

from various causes.

Grinding the teeth (if they ^{are old enough to}

have them) - Rolling the eyes -

^{the child ought to be}
When awake - smiling; playing; takes

nourishment; listening to sounds; enjoying light;

^{if otherwise, something is wrong.}
Crying when taken up or touched, - at a particular
part, - as one side.

Billard's division of ^{is of some value;} the cry into (4)
cry proper & ^{the} reprise or return.
The 1st, expiration; 2nd, inspiration
after the cry proper prolonged & sonorous;
reprise shorter & sharper 1st may
be heard alone; or even 2nd alone. The
latter ^{occurs} after ^{long} & exhausted crying. Towards
the fatal end of all diseases, ^{the} reprise
disappears.

Tears are after 3rd or 4th month.
After that, suppression of tears a dangerous
sign (Horscan).

Round plump & solid figure
or emaciated (rapidly) —
Rosen that natural with embonpoint.

Decubitus & movements

(8)

Wants of ill to lie on back or be
carried about — ^{again,} or sometimes,

cries if touched. Agitation, &

betting of sickness; ^{apathy or} stupor or coma.

Most restless in early stage of abdominal

complaints; & in first stage of
cerebral affl. of brain. In

late stage of this, especially if
tubercular, — lying on side, with legs
strong bent, arms drawn close to or
crossed over breast. — "Andromache" cry or scream.

Starts, with cries of pain.

expands of hand to head — emaciate,
or eyelids —

Jerks — of limbs, or mouth — presage
convulsions. Paralysis: some overlooked; & fractures.

Skin: temperature dryness fever!
or moisture) color, swelling,
(of joints, - or hermal) - eruptions.
[Temperature - See top of next leaf]

Natural color of newborn:
red: w 6 or 5 days, fades - may
become yellow; not common jaundice;
eye white, digestion good - no disorder.

Blue? - cyanosis - permanent.

(causes) - newborn may be temp or w Blue,

hands & feet, lips - imperfect oxygenated blood.
Later, asphyxia, - as a cramp, capill.
Coag bruits, cyanosis, stridor, atelae.
Tans (collapse flaps) - chill.

Extreme pallor, ^{sometimes} also in respiration 10

Obstruc. Capill. bronchitis, —
Membr. crop, Dangerous ^{sign.} In chronic
Dyspnea, as in scarlet fever, —
usually pale, thin; more so
in "marasmus" or infantile phthisis.

Eruption — peculiar to certain diseases,
as the exanthemata.

Oedema — or local watery swelling —
soft & pitting —

Swelling of joints, or of glands —
Abscesses —
Tumors —

Examine always scrutinizing — and
consider the state of the patient's endowment.

Value of this unfettered scrutiny
Do women need it
e.g. — particularly?

[about the mode of using the thermometer.]

(with P. H. H. H.) Bärensprung (quite by Wunderlich)

found of 37 newborn infants the temperature
over $99.5^{\circ} F.$; only one below $98.15^{\circ} F.$ -

Soon after birth he found them to lose heat
to go down to 98.6° (adult average, Wunderlich)

In 10 days a little higher again - often
up to $98.08^{\circ} F.$; not unfrequently 99° , sometimes

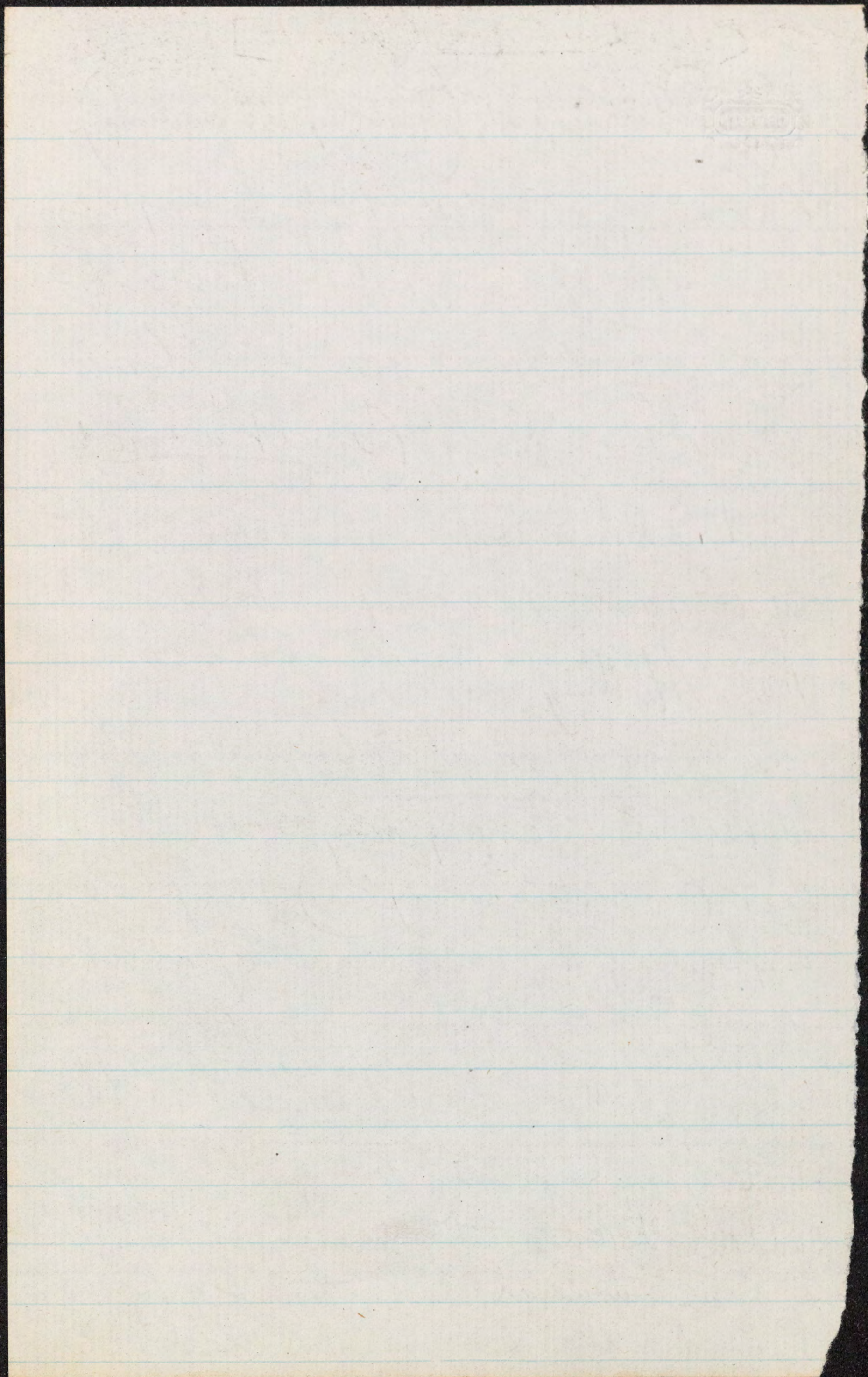
100° . ~~Morbid~~ infants, apparently healthy,
have a more variable temperature than

adults. Even crying may raise their
heat (in rectum or axilla) perceptibly.

very common they have a rise of about a
degree at noon, & nearly as much in the

evening. Under morbid causes the fluctu-

ations in temperature are apt to be more
sudden & extreme than in grown people, there-
fore an unusual heat, though significant,
is somewhat less serious in a child. ^{It may come} & go.



Temperature: (Forster, in 22 children) soon after birth 30° Reaumur 99° Fahr.
(low in immediate after birth - then rise to max. 4 days after birth)
Inlay's healthy range 2° Fahr. Fall, evening, 1, 2, 3 from 74 to 90 $^{\circ}$ F.; min. 2 $^{\circ}$ F.

Pulse: Commonly static like at birth
(Girl) - 120 to 140. —

Billard - 115 first year,
but variable above that.

Howes - first week - 102 —

Other authorities on actual exam. of 4 mo cases
2nd Year 118 to 110 - say 115 —

2 to 5; 92 —

5 to 14; 75 —

Sleeping, much slower; 17 pul-
sations in a minute ^{less than waking,} between 2 & 6 yrs;
5 beats faster in girls, average.

Irregular often in children, especially
in sleep. Not important in them.

Pulse very irritable in infants & children;
can't up to 150 & more! — N.B.

Heart —

(12)

not much different from
adult — Percuss. resonant 1 1/2 in.
transverse (right & left nipple) 2 1/2 vertical —
Heart sounds not heard at back in
health.

Respirations (Count them) —

1 yr male, 39 — from 2 m's to
2 yrs 35 — ~~2 to 5, 23~~ —
~~2 to 12, 23~~ — 12 to 15, 20. Sleeps,
several times in a minute.

Diaphragmatic br. in child.

Easily hurried, like pulse. Pneumonia
alters in disease to 80 or more — Cap. bronch.
Expiratory breaths bad. Hoarse or whistling in groups.
slow in chronic condition

In atelectasis Pulmonary resp
very frequent — & ribs ^{below} move
inward backward in inspiration.
Similar (Jenner) also in ^{marked croup} weak chest of rickets.

In brain inflammation

first stage,
A jerk: — then slow; — then

jerk again at last ^{towards the time of death.}
When the abdominal or diaphrag. breathing is free and full,
the ^{inflammatory} disease is not likely to be present in the abdominal
organs: it may ^{be} in the chest. If the
respirations are more thoracic, trying to
save the abdominal ^{exploration} the reverse.

~~I think a cold can~~
~~be the cause of~~
~~the~~
Back will generally be
tender — the ^{shoulder}
End of 6th Lecture
1868-9.

(14)

Exam. mouth & fauces, for
exudations — e.g. pseudo-membr. of ~~croup~~
~~or~~ diphtheria — also ⁱⁿ scarlet fever
& sometimes measles — ^{strawberry tongue}

Mouth especially in infants: —
thrush — aphthae — ulcerations —

Gangrene —
State of teeth & gums —
Not hard to see in young children because
crying opens mouth — of older
wont, handle of silver spoon —

For throat, more difficulty —
Handle of descent-spoon or a moderate-
sized ivory paper-cutter (washed first)
Sometimes I have to place the child on
the lap of an assistant (not always best
the mother ^{other, leaning backward} ~~put~~ its head on lap of the doctor.

~~(Throat, with handle of spoon, or paper catheter)~~ (15)

By the finger in the mouth we

may sometimes judge of the heat,
swelling, tenderness of the gums, &
dryness or moisture of the mouth.

Whether an infant will seize the
finger placed in its mouth, or will
shrink from it with crying, is

often significant.

~~(Good position for eye, or long gun, when resistant)~~
~~on left of assistant by head & doctor's knee~~

The manner of swallowing, maybe

important: easy, & continuous, — or

gulping, with effort & expressing

pain; showing soreness of the throat.

Also, if respiration be morbidly
hurried or difficult, drinking & swallowing
are interrupted by spasm, — as not in
a healthy infant's swallow.

Vomiting. — when other than
the mere overflow of a too-rapidly
filled stomach — this is a noticeable
Symptom in a child — the less
Serious than in an adult. The
Curve of the stomach is less in early life,
the oesophageal entrance nearer to
the ^{Right} or pyloric end where the stomach
joins the intestine. Vomiting is thus easier
in the child.

It becomes a symptom of some
consequence, when it is frequent, — or violent,
or attended by paleness, faintness, or distress, or
fever, or diarrhoea. Then, — its cause
may be — ^{mere indigestion} — or
irritation or inflammation of the stomach
itself — ^{or inflammation or obstruction of the}
intestines — ^{or} ^{other disease of} ^{or} ^{eruption from} ^{or} ^{brain disease}
Pneumonia — pleurisy —

(17)

Discharges — urinary &
fecal — must ^{never} ~~not~~ be neglected in
the practice of medicine — most
of all in infants, whose inability to
describe their bodily states makes
it necessary to search out all possible
means of enlightenment about them.

The kidneys should act several times
in the twenty-four hours. — If
they do not, for 12 hours at once, & it
shows disorder — though not necessarily
serious. Warm bathing will often right it.

Sometimes 3 or 4 drops of Sir. sp. added in water.
with, ^{there be} if irritation, & a high colored scanty
discharge, two or three gr. of bicarbonate of
Sodium also dissolved in it. —

Changes in the urine, as to (18)
color and density as well as amount,
may, it should be remembered, in the
child as well as in the adult
occur from day to day, ^{to a considerable extent, transiently,} without showing
positive disease. They may be, and
often are, rather, the indications of
the manner in which the powers of
nature are correcting & preventing
the effects, & averting the injurious
action & progress, of morbid actions.

But sometimes it is otherwise:—
as in the albuminous urine of
severe scarlatina, late stage;—or,
worse yet—the bloody urine of the
same affection, accompanying or threatening drop-
sy & it may be death.

E.g. latent sediment after parox. of fever.

Regular examination by the physician of the discharges from the bowels of the sick child is important in all illnesses, — and ^{quite} indispensable in those in which the bowels are the seat of disease; as in diarrhoea, cholera infantum, & dysentery. As many of the evacuations as possible should be inspected; regarding their number, magnitude, solidity or fluidity, and nature of the material, — besides ascertaining whether there was or was not pain or straining with the passages. So only can a correct idea of the nature and progress of a case be obtained. Of course all such materials for inspection should be kept outside of the sick-chamber or other inhabited rooms — ^{kept} only so long as is needful for the purpose.

The characters of discharges from the bowels, may be briefly enumerated, as being — ~~(often very marked in childhood)~~;

natural — as in health —

Hard and dry — in constipation (painful: of injections of oil, at least — or lard —)

Slate-colored — in torpor of liver

~~Black~~ ^{in some febrile attacks —} not often in children unless iron has been taken.

Green — frequently — in digestive & hepatic disorders, explanation either biliary or hemorrhagic.

Yellow — from excess of bile — not very often —

Watery — in summer complaint, other diarrhoea & cholera —

Slimy — containing undigested food — not uncommon in children — in inflammation of the bowels — dysentery, of cholera, &c. —

Offensive — in cases of retarded excretion from bowels, liver & skin —

Bloody — in dysentery — Piles are rare in childhood —

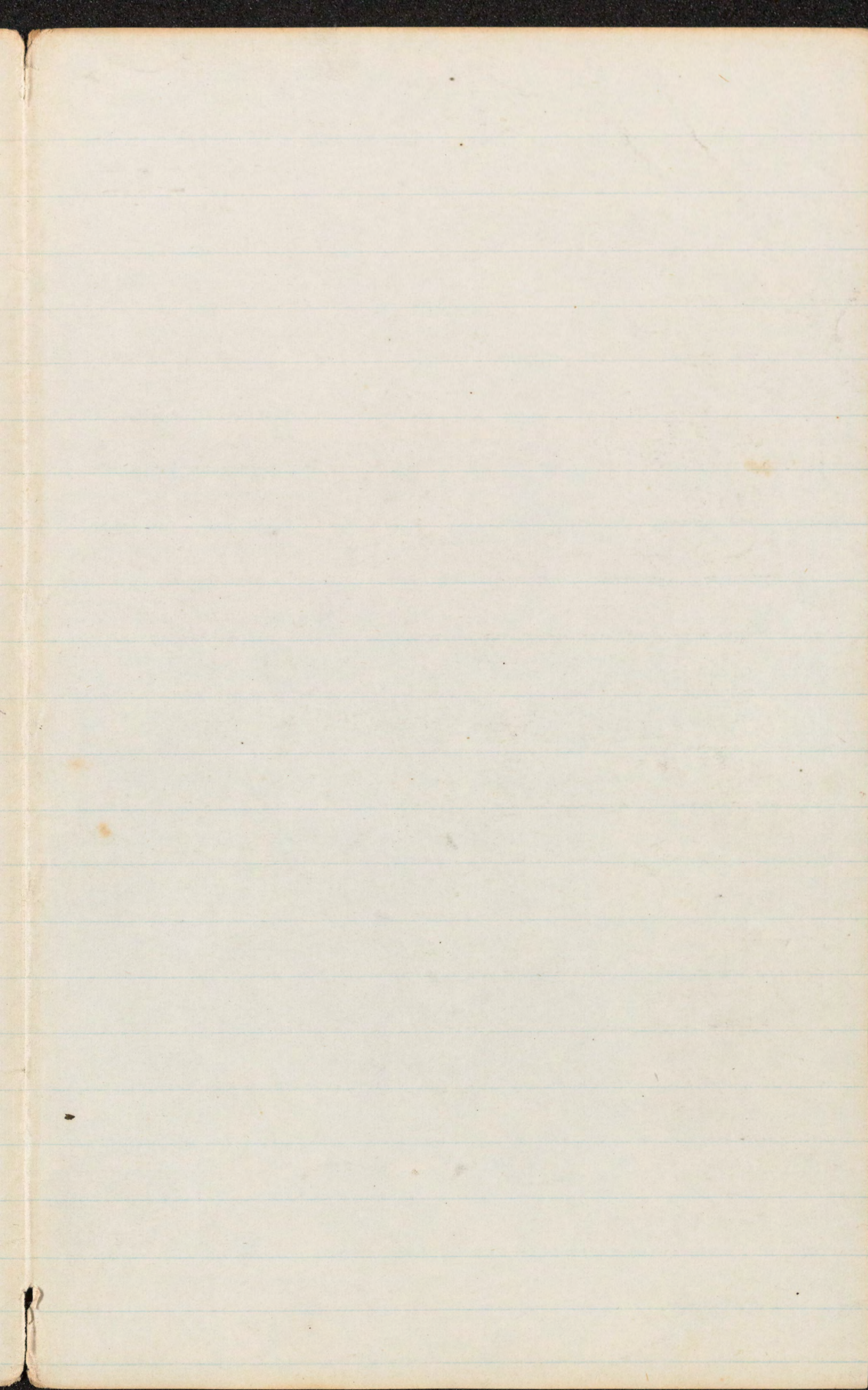
Purulent — in extreme cases of dysentery, — or abscess.

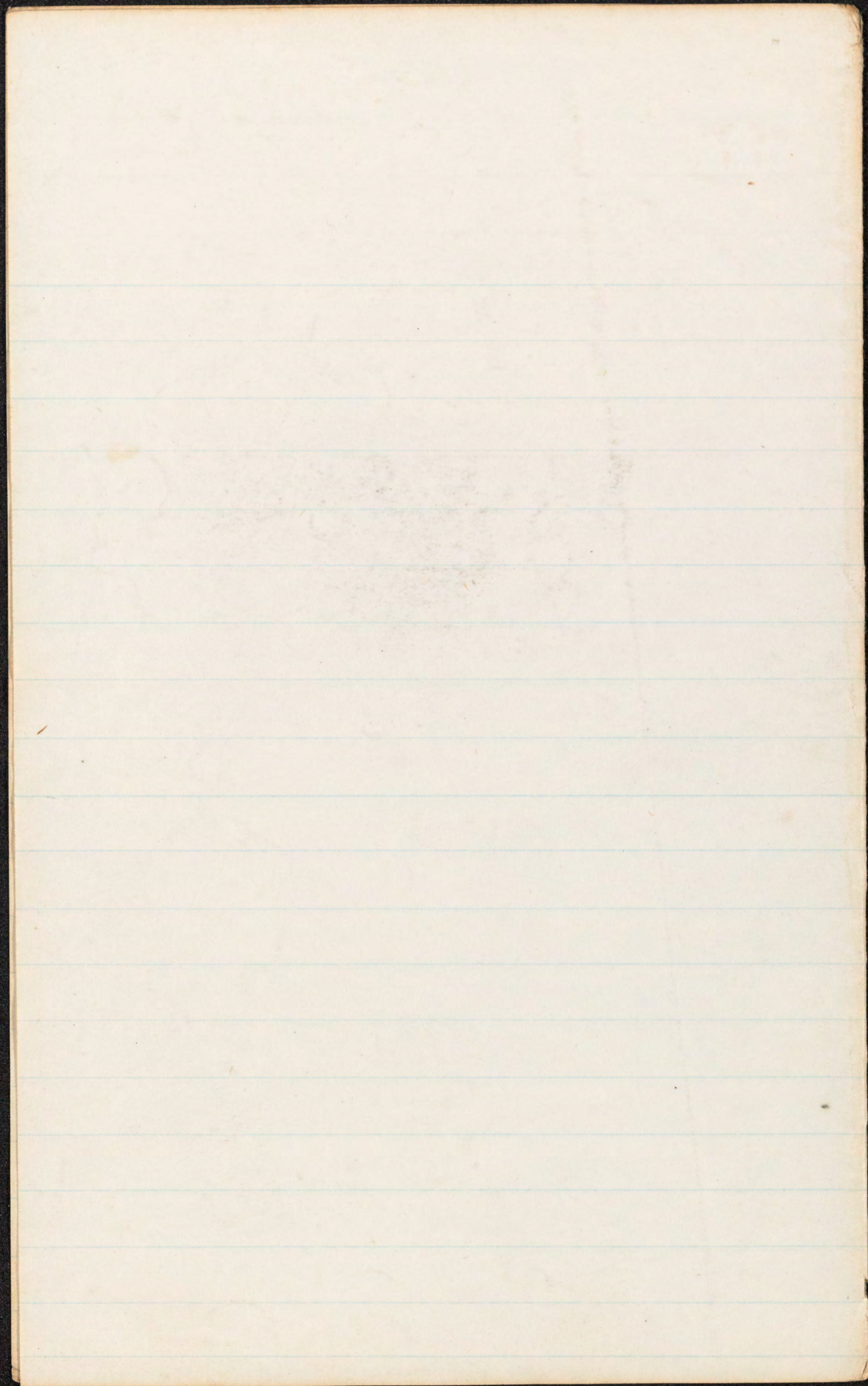
Examina. of abdomen externally often difficult because of child's alarm making it rigid & obscuring signs of tenderness. Try it usually before percussion & auscultation, as then less apt to have become tired or frightened. Vallée suggests carrying the child in the arms to a bright light which amuses it; then, gently slipping the hand to the abdomen, one can tell whether it be swollen, or tender, or not.

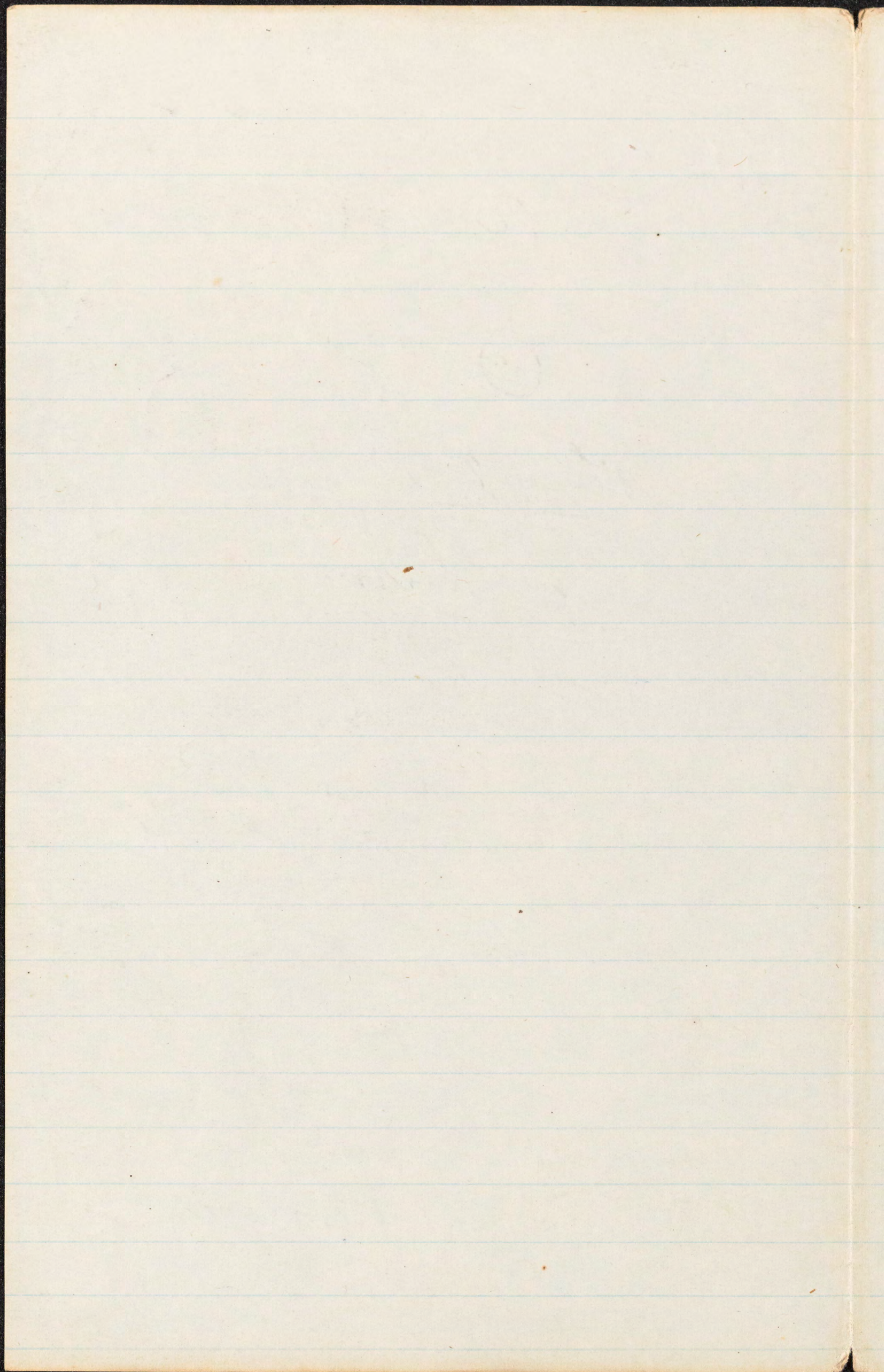
C.

③

Physical Diagnosis
in Children,







Physical Diagnosis in Children.

Difficult to obtain perfectly, - because of the alarm & uneasiness of the child at the needful ^{close (& manipulations)} approach of the physician. For this reason the stethoscope has to be dispensed with usually. Except in affections of the heart, I believe that nothing is lost by this; the ear to the chest is generally better.

Authorities urge that examination of the chest should be made without any clothing between the ear and the body. But a room should be rather too warm, for this to be safe anywhere except by the stove, grate or warm air flue. By the way, I may take occasion to say just here, that one of the losses of our late modern civilization is, that of the old fashioned open wood fireplaces; especially in sick chambers and nurseries. The

Perfection of heating is the combination, ⁽²⁾ in
the same room (if it be large enough to
require both) or in communicating rooms,
of the warm air flue, with a good sup-
ply of out-door air in the furnace air-
chamber, ~~and~~ ^{and} a large water-evaporator
over its fire, — with an open chimney
wood fire; or next best to it, — of
a wood-burning stove; next to that,
a low down grate supplied with air
from out of doors. —

But, — unless
there is some direct heat to protect the
uncovered chest, — I would rather have
my diagnosis of a rale or rhonchus
or percutaneous resonance
a little less subtle, ^{than} ^{to} endanger the
increase, by chilling, of the very malady
we wish to discern and to cure. I
have heard it charged upon ^{some} French
physicians, of great success in the
science of medicine, that their two

Alms were, skillful diagnosis ³
of each case of disease during life,
and opportunity for careful autopsy
^{examination} after death; ^{and, a} cure being in the way of
the latter altogether, — and preventing the
verification of the former, naturally
their desires were not very strong in
its favor. I do not believe this
ever to have been true of many prac-
titioners, in France or elsewhere,
Heaven forbid that it should
ever be true of any here.

As to physical exploration of
children, — one smooth-laid & thin
garment will suffice, for the short time of
the examination, — of course it is
true that, for it, the less between the
eye and the body, the better. In warm
weather uncovering is safe enough.

PerCussion should follow (A
auscultation; auscultation first
because perussion will alarm the
most, & ^{thus} defeat or make more
difficult ~~the~~ listening to ^{the} breathing
sounds. Unless, it happens that
we can get a chance to place
the ear to the chest while the
child is asleep; that opportunity
should always be taken.

When it is awake, gentleness &
management are necessary. Amuse it
and gradually get it into position -
~~holding~~ it to be then amused by another.

The back of the chest will usually
suffer for auscultation in a child.
most of its thoracic physical signs are ^{discovered} there.

A good position is, with (5)
the child in the arms of the mother
or nurse, with its face over
her shoulder; or else, lying,
if a young infant, on her lap,
with its face beyond ~~her~~ ^{or thigh} knees;
or, sitting in the lap, supported
by one hand in front of the chest,
the other under the back of
the head. If it resist, ~~this~~ last will do the best.

~~What the mother should do~~

The breathing sounds in a child
^{generally} are louder and more blowing than in an
adult; the vesicular murmur is of the
kind therefore called, when met with
in a young person, puerile.

(6)

Yet, in an infant under 2 years of age, during sleep or when very still, the vesicular murmur is not so strong, even, as in the adult. Motion or excitement at once gives it the stronger character.

As at other periods of life, the expiratory sound is much shorter & weaker than the inspiratory. In very young children, especially at the sides of the chest, the expiratory sound may not be present at all. The loudest and clearest respiratory murmur is heard over the anterior, lateral, and lower posterior thoracic regions.

For percussion in a child, (7

the middle finger of the left hand will be the best pleximeter, — and a single finger of the right will give tapping blows of force enough. The resonance is more sonorous in children than in adults. But it varies more in the child in health. When it ~~will~~ is very quiet, breathy softly, the air-cells are not inflated or distended — and the percussion-resonance is not so very clear. But a little movement, with increased breathy force, will make it much louder at once, by filling up the lung cells with air.

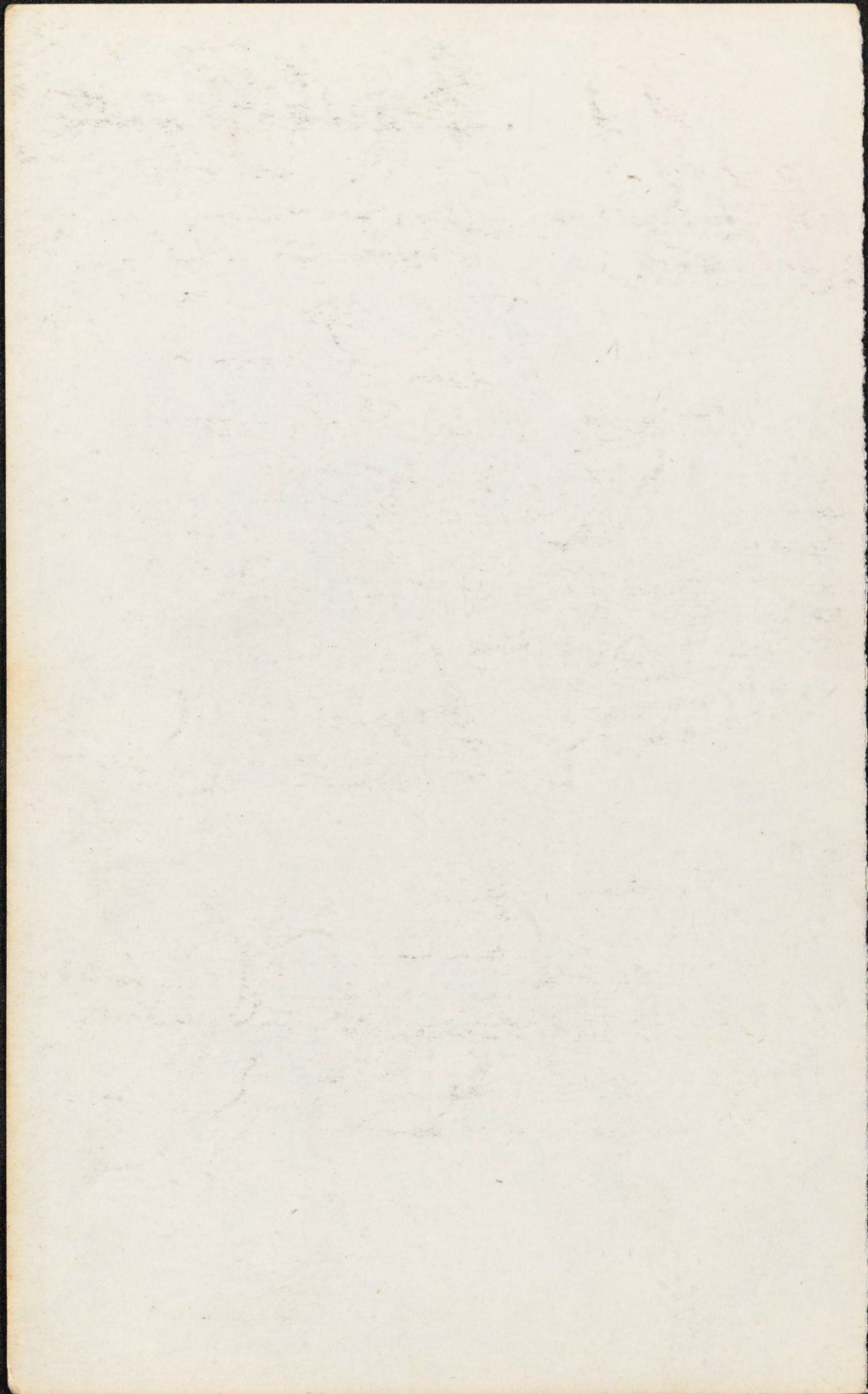
No in the adult, the (8)
percussion - sound is loudest
in front beneath the clavicle.
On the right side - an inch or two
below the nipple, the liver ^{there} ~~subsequent~~
begins to make it dull. On the
left side the heart dulls it for
a space ^{almost circular} of an inch or half to two
inches or more ^{in diameter,} transversely from the
left nipple to the sternum. Again
on the left side below the 6th or 7th rib
the sound grows tympanitic, the
peculiar hollow stomach-sound
except when the stomach is full;
when the sound there becomes quite dull.

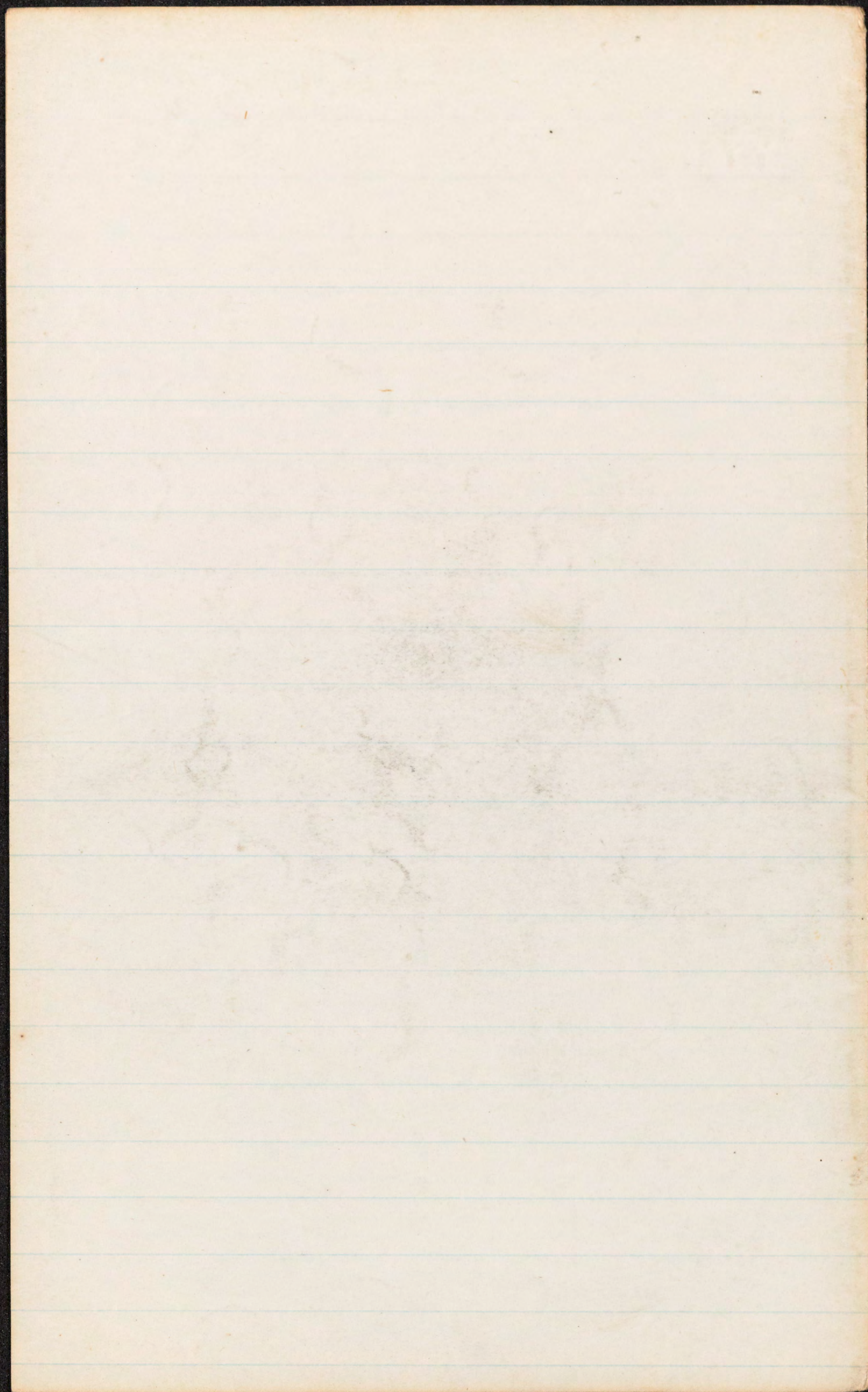
Posteriorly, above the spine
of the Scapula the sound is
Dull ^{and} only somewhat less so
over the whole shoulder blade.

Between the Scapulae it
is clear. — ~~XXXXX~~ Below,
^{in the inferior scapular region,}
~~XXXXX~~ on the right side, it
becomes dull towards the liver,
and on the left ^{it is so} towards the spleen.

It is always right to com-
pare both the auscultation &
percussion sounds of the two
sides, — as we do in adults.
But in children, both pleurisy &
pneumonia are rather more apt to be double.

(9) ~~that part~~ several (only that part)
comparison would reveal
I consider that
in adults





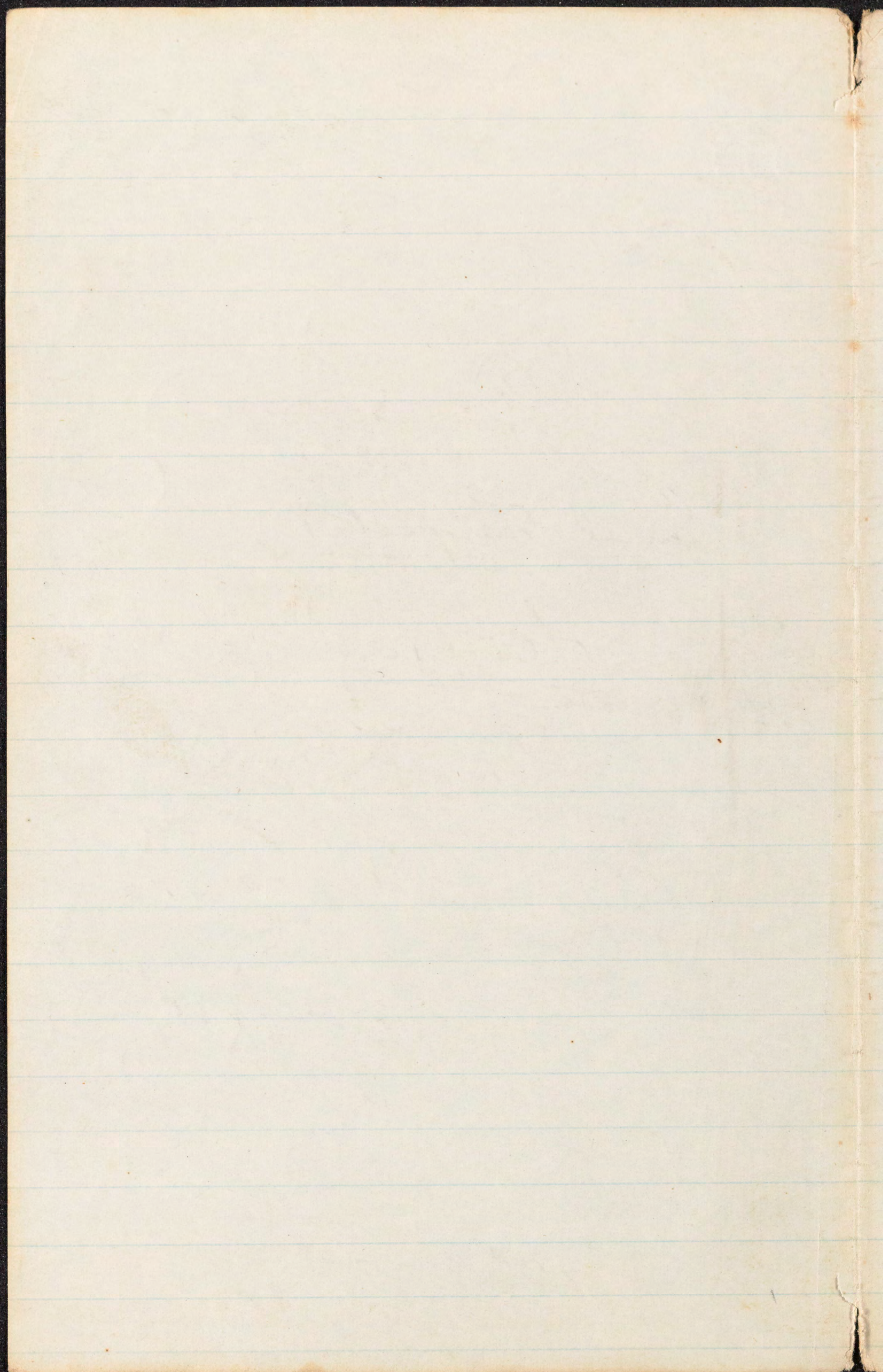
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(4)

General Therapeutics

of Children: i.e.,

general principles of treatment
of Children's diseases.



Remedial & Medicinal General Therapeutics

Next, -
of Children,
Common Indications.

Visiting, - though I trespass upon,
the department of the Professor of Therap. Medicine.

Indications most common;

(see my book list)

- Anodyne/Calumnative - as opiates & camphor
- Protective - as demulcents & Surg. Dr.
- Balancine - as cold to a hot head - warm foot bath - blood letting
- Economic - astring. in diarrhoea
- Climinative - cathartics & Diuretics
- Antidote - Qu. in ague
- Alterative - as arsenic in skin dis.
- Recuperative - as iron, & cod liver oil, salt. bath - country & sea air.

laxative & purgative -
mildly locally anodyne -
Composing -
Expectorant -
Balancine - frequently needed at all ages -

Doses for children 12^x -
Prof. & age to age increase
Exceptions, Calomel & Castor oil & Narcotics
Reasons for smaller doses - less bulk of blood to dilute -
Excessive impressibility - no dulling of sense by habitual impressions.

Exhibition of medicines -

Syrups, extracts, & powders of medicine -
Teaspoonful quantities or less, as far as possible.
Yet with young children the moral persuasion is most important, as their taste seems less easily disgusted than ours.
For instance, assafetida & cod liver oil & castor oil.

See pages of list of

medicines most available for children.

External Applications in children: - - over -

Baths — poultices — plasters —
ointments — tobacco leaves — onions —

blisters — These have more effect in
children than in adults. And so do all
hygienic influences. —

Be sure not to give the
children too much medicine.

Bleeding children —

Leeching — ^{Ammoniac leeches —} Gipping —

Blisters —

Pure air is

salutary & recuperative
especially to children.

Care to make the administration of medicines to children as little of a burden as possible is indeed doubly ^{important}, almost, by the fact that it is here that the homoeopathic practitioners find particular opportunity - in the ^{tastefulness} of infinitesimally mixed with milk sugar. I mean not, however, meaning hom

~~as the more modern modifications of it differ much less in quantity from those of regular~~

~~of the last lecture, ~~and~~ in speaking~~

certain selected medicines for children,

I assume or claim on behalf of this selection nothing but ~~my~~ ^{our} ~~own~~ ^{own} ~~working~~ experience and preference in practice, leaving you open of course to all possible liberty of choice under other teaching, ~~and~~ authority, ~~and~~ experience.

~~I must look back for a moment to the class of astringents, to supply an omission.~~ Acetate of lead -

- 1872. I made the remark in reference to my teaching of Physiology that a very small fraction ^{of my teaching upon that subject} ~~only~~ could claim originality; the rest being derived from books or ^{from} other instructors. As to the practice of medicine, however, my conclusions, although starting with the knowledge & opinions common to the profession, ^{most of them} are based finally upon my own experience, of twenty years' practice in the treatment of disease.

8th Lecture
On
Hygiene & Medical
Management of
Children.

W. M. C. 1868-9.



Anodynes

Paregoric, Laudanum, Hyoscyamus, Atropa
~~Atropa~~ Lactucarium - Chloroform -
Hydrochloric, Chloro ether (sweet) -

Antispasmodics

Camphor - assafetida - Belladonna
Must - Sin. sp. nitre - Onion Garlic -
Infus. of ether - or chloroform -

Refrigerant Sedatives

Tartar. emetic - very small doses - Acetate of
Ammonia - citrate & nitrate of potassa -
Lemonade - Effervescence don't please children -
Nervous sedatives - very cautiously -

Trinct. of Veratr. Vinid.
Aconite (I have never used) Trinct. of Lobelia - Cam.
Hydr. Digitalis - Dulcamara - Wild cherry -

Alteratives

Calomel - Hydrargyrum creta. (See West, p. 30)
Taraxacum - Leptandrin I have not tried - R. Podophylli
Lupul. solution - Chlorine water - Sulphites & Carbolic Acid
Chlorate of potassa - Calcium
Minor Correctives - Spiced
Bрист. Sack - Prepared chalk (test ocul. cancer) - Sulphur
Syrup of rhubarb -

"justly popular remedy?"

Of medicines that act on special functions or apparatus: 3

Emetics

Speceruanha — Alum — mustard or salt — not time-syrup — ^{coxis}

Cathartics

Laxatives — a. Dietetic;

(not for baby, unless scraped apple or peach — or orange — fruit) — peaches — apples — oranges — st. prunes —

Molasses — bran bread — b. medicinal; Manna — Glycerin
olive oil — enemata — 2. Mild purgatives —

Magnesia — Castor oil — Simple Syrup
Rhubarb — Green tartar — sulphur —
Tarrant's powder — or 3. granular citrate of magnes.
More active Purgatives —

The extr. of Scammony (with oil of fennel)
got it in 31

Rochelle salts — Citrate of Magnesium

Resina Podophylli — ^{Sometimes} ^{Even} Jalap or
very small dose, in with Syrup.

Scammony (castor) or
in rare cases portion of dose of Elaterium — or Castor
oil — carefully —

Diuretics

Low sp. of Nitre — Lemonade — Syrup or Decoction of Squill
Nitr. potass. — Citrate of potass. — acetate of potass.
Comp. sp. of Juniper — Watermelon seed tea
Green of Tartar

Diaphoretics

(4)

For sp. mtr - ~~Sp. Mund...~~ lemonade -
name of species.

Dor. ponders - Tartar emetic - Citr
potas - not effervescing at the moment.
water!

Pectorants

Specac. syrup - Oxymel of quill - Tart. emetic
very carefully - not domestic as this syrup - As -
sifetida (milk) - Chloride of ammonium
wild cherry syrup - her remarks on
Ext appl. in children

Rubefacients

Hot flannel
Sponge of hot water (in grip or erysipelas)
Hot plaster
Spice plaster
off. clove, cinnamon, ginger, plum berry -
Mixed
Mustard poultice
Oil of turpentine, diluted with olive or almond oil
Mustard plasters - Cremis prepared
Begin lecture, Nov. 7. 1871.

Epispastics ①

Cantharidal Colloidion

Tinct. Iodine almost such.
Exsiccants & Internal Demulcents ③
Gum water - Flaxseed tea - Papier Hayard
Berber leaf tea - (Poor man's plaster)
Sclat moss & Irish moss - glycerin - of London
in crout - Ice

External

②

5

Emallints.

Antacids.

water

Bread ~~with~~

~~the~~ ~~acid~~ ~~and~~ ~~alkali~~

~~milk~~ ~~(flour)~~ ~~slipping~~ ~~down~~

~~Glycerin~~ ~~elute~~ ~~—~~ ~~lime~~

~~water~~ ~~boil~~ ~~—~~ ~~Glycerin~~

~~Glycerin~~ ~~(Glycerin 5 parts, Yolk of~~

~~egg 4 parts)~~

~~Spermaceti~~

~~ointment~~

~~Cold cream~~ ~~—~~ ~~Cocoa~~

~~Butter~~ ~~—~~ ~~Tallow~~

~~Antacids~~

~~(mentioned already)~~
~~as Correctives~~

~~Bread~~ ~~stuck~~

~~Magnesia~~

~~test~~ ~~ost.~~

~~Oculi~~ ~~Cancerum~~

Anthelmintics

④ or Vermifuges & vermicides.

Al. ex. Spigel.

Usem

Santonin suppositories

Pumpkin

and for tape worm

Koosso

for a few moments,

General

the topic of the theory of the Therap. of Children.

Over

See external applications, -

(6)

Bathings - poultices - plaster -

Ointments - tobacco - leaves -

Onions - ^(generally small) blisters - ~~these~~

have more effect in children than in adults. And so do all hygienic

influences. ^{This compensates largely for the difficulty of administering medicine to young patients.} Let me repeat the advice, - Be sure not to give the

children too much medicine. Nature will do much for adults and the old; but more while vital energy is fresh & abundant, in childhood. ^{we may do greater harm by over-interference} It

does not follow that every symptom must have its dose of medicine. A great many little attacks will get well with very little done. The presumption, ^{in favor of the rule,} strong at all times of life, is strongest in infancy, - never to give any medicine unless you are sure there is good reason for it. ^{You may sometimes disappoint parents -} Placebo's are admissible.

Bleeding children. Leeching (American leeches) & Cupping. ^{See cover & notes for this section}

(Blisters). & occupational, espec. Pure air is sanative ally to children.

“Its use extends to all inflammatory, typhoid, and scarlet fevers, measles, and every instance of acute inflammation where there is much heat and dryness of the surface. Fever assuming all the typhoid symptoms will be found to change its character completely under this treatment in twenty-four hours. It especially soothes the nervous system, procures sleep, lessens the frequency of the pulse, allays the heat of the skin and correspondingly the thirst. The pulse may be reduced from 120 to 90 in a few hours after a few applications of the ointment. It corrects the fetid and offensive odor arising from patients; contagion seldom spreads after its use, very rarely even in crowded rooms. When early employed the fever is prevented from running into the continued type, and the patient soon becomes convalescent. Finally, it should be observed that it is always at command, perfectly safe, harmless, and is, perhaps, never contraindicated.”

In dropsy of the febrile or inflammatory form, Dr. Taylor found that inunction produced the most favorable results, even in cases treated unavailingly by eminent physicians, and the good effects of this peculiar method were equally striking in cases of hydrocephalus, the improved action of the skin serving effectually to remove the watery accumulations caused by these diseases.

Of inunction in phthisis Dr. Taylor says:

“I have seen great benefit derived from it in incipient cases, as well as in other pulmonary complaints. In acute bronchitis, attended with a hot skin and great expectoration, I have witnessed the greatest benefit, and have known the expectoration to be reduced from a pint in twenty-four hours to three or four ounces in the course of a few days.”

In 1830, Esther Cook, age 37, a confirmed lunatic, was admitted to the Clerkenwell Infirmary, and treated for scabies with the usual sulphur ointment. After two or three weeks of rubbing in, her intellect was found to be restored, a fact which led Dr. Taylor to employ the hard ointment in treating cases of mild insanity. The result showed in a surprising manner the sympathy existing between the skin and the brain, and the beneficial effects of inunction upon morbid cerebral conditions, not only in ordinary mania, but also in delirium tremens.

Dr. Taylor's faith in inunction was thoroughly tested in his own case by a severe attack of typhus, which he cured by the free application of the hard ointment to the skin, to the exclusion of other medication, a result which naturally confirmed his confidence in the system.

I have found no striking cases of medical anointing recorded in this country, except in a suggestive paper by Dr. W. R. Fisher, published in THE MEDICAL RECORD of the 27th of March last. A child of four months, almost *in articulo mortis* with cholera infantum, and given up by the family physician, after thorough treatment according to the approved methods, was saved by hourly inunctions from head to foot with warm sweet-oil. “After each application,” says Dr. Fisher, “it seemed to be more and more soothed and strengthened. The vomiting ceased; the passages from the bowels improved in color and consistency, and diminished in number.” The child recovered entirely, owing its life without doubt to the use of oil by inunction. In another case, a child of the same age, an obstinate intestinal disorder, which had defied internal medication for months, yielded in a week to inunction with sweet-oil applied every night. Dr. Fisher further says:

“In acute inflammation of the lungs, pleura, and bronchial tubes, I have several times seen most excel-

N. Y. Medical Record, full of 1875

lent effects follow from the use of inunctions. In the lobular pneumonia of children there is no remedy with which I am acquainted that will so speedily induce sleep, relieve distress, and put a stop to the short moaning cry as warm sweet-oil, frequently applied to the whole body. Inunction is likewise of great benefit oftentimes in chronic diseases of the lungs, phthisis, chronic pneumonia, bronchitis, and emphysema."

It is probably in cases of this character, in phthisis especially, and with cod-liver oil as the unguent, that the profession generally is most conversant with inunction, and most thoroughly convinced of its efficacy. Dr. John Hughes Bennett, who introduced this oil into British medical practice as a remedy for pulmonary consumption, is on record in the *Edinburgh Medical Journal* for April, 1853, as declaring that there is every reason to believe that inunction might be very beneficial. In this way, he explained, the fatty matter is introduced into the lymphatics, and serves to elaborate blood through the agency of the mesenteric glands.

Dr. H. W. Fuller, in his valuable work on "Diseases of the Chest," after referring to inunction among the ancients, says:

"It is in constant use in the present day among the natives of Western Africa, who suffer little from the ravages of phthisis. Even in our own country accidental inunction takes place to a limited extent in certain classes of the community. Persons engaged in wool factories, where large quantities of oil are employed, tallow-chandlers, butchers, and others, are necessarily in contact with fatty matter throughout the day, and it has been observed not only that they are usually well nourished, but that they are less liable than others to suffer from consumption. But more than this: experience has established the fact that the endermic method of introducing the oil is often very serviceable in phthisis. Cases have been published by Dr. Simpson, of Edinburgh, and other observers, which are quite sufficient to prove its efficacy, and in my own practice several instances have occurred in which its operation has been signally beneficial. One gentleman whom I saw in consultation gained a stone and a half in weight in less than three months by the persevering use of it, and the physical signs of pulmonary disease subsided greatly at the same time."

I may remark here, in confirmation of the benefits of accidental inunction mentioned by Dr. Fuller, that in a cotton-seed oil-mill at Cos Cob, Conn., now abandoned, coughs and colds were unknown among the workmen in the press-room in constant contact with the oil, but were common enough among the men employed outside. The suppleness of the joints of the press-room men was remarkable, and the full muscular development of those who had worked there long was no less noteworthy. One workman, employed there ten months, is said to have gained twenty-two pounds in that time, while another, in a still shorter period, enlarged the measurement of his chest from thirty-five to thirty-eight inches.

We have now, it will be observed, the testimony of Dr. Bennett in favor of inunction with cod-liver oil in phthisis; the testimony of Dr. Fuller to the same effect, and also to show the anti-phthisical advantages of incidental inunction in the course of certain occupations; the testimony of Dr. Fisher as to the benefits of rubbing with warm sweet-oil in the pulmonary affections of children; and also the testimony, before cited, of Dr. Taylor as to the great utility in lung diseases of inunction with his "hard ointment," composed of equal parts of lard and suet. Here are marked therapeutic results derived in the same class of cases from inunction with one vegetable and two

paths, who believe in infinitesimalism; of whom I suppose
there are still a few left.

(Began Scarlet Fever in 9th Lecture?)
(Niemeyer - blood in many cases of
so also of Volz - ~~meningitis~~ ^{meningitis} in acute simple meningitis
J. F. Meigs - blood in acute simple meningitis
Aitken, Chambers, Richardson, Jaccoud, France - &c.)

Cupping, sometimes -

Leeching: - a few & portulac? usual:
more & dry? Dr C. West -

I doubt his view - reaction during leeching, local flow,
retained by the draining. - See the leeching yourself.

Leeches not in sight of the child - (Places) -
American leeches for children.

Does child or adult most feel loss of blood?

(Syncope - convulsions -) Don't repeat bleedings in
Sometimes feed after bleeding - same case. -

Stop bleed - by local bites
by pressure against bone if much

- by little bits of margin of newspaper, one over another - Touching with tinct.
chlor. of iron - or creosote - or tannic acid - alum, or nuxia - often used so. -
- collodion - - spider's web -

(Back to p. 6 at foot now -)

→ (Diet of sick children) ←

Amounts of blood to take: by venesection. - 1 oz. under 1 yr -
[Inflam. Crout - meningitis - Pleurisy -]

2 oz. under 3 yrs - 3 oz. under 5 yrs - 4 oz. under 10 yrs
6 oz. under 15 - 8 oz. under 18 - 10 oz. under 20 yrs
Leeches - each 1 to 2 dr. - very few often will do good - 2 on each
side of head e.g. - or 4 or 6 over top of breast bone (carefully there). -

~~WATER~~

Principal Diseases of Childhood -
(mainly after West)

Meningitis - simple 26

Tubercular 27

Hydrocephalus 28

Convulsions 29

Chorea 30

Night Terrors 31

(Infantile Paralysis) 32

Collapse of lung 14

Croup 12 Laryngotr.

Whooping cough 13

Pneumonia 8 Pleurisy 9

Calant 10

Bronchitis 11

Phthisis of childhood 15

Sore mouth 16

Thrush 17

Diarrhoea 20

Bacterial fever 18

(Softening of stomach) 19

(Cholera Infantum) 23

Dysentery 24

Falser dysentery 21

(Morus) 25

Scrophula 33

Rickets 35

(Care of spine?) 34

Scarlatina 1

Measles 2

Varicella 3

Varicella 4

Vaccination 5

Varicella 6

Mumps 7

20
Orchitis
Prostatitis and

Skin diseases 36

Scarlet fever - 1809 - 3 cases
Philadelphia

1813 - 17 0

1820 31

1831 200

" 2 307

1843 395

1858 992

1860 591

" 1 1190

1868 224

London, in 18 years

1848 to 1866, 52,451

Diseases of Children.

Zymoses.

Scarlet Fever (1)
Measles (2)
Rubella & Röttheln
Variola
Varioloid
Vaccinia (3)
Varicella (4)
Whooping Cough (5)
Erysipelas (6)
Diphtheria (7)
Cholera Infantum (8)
Typhoid & other (9)
Fever of children!
Cerebro spinal Fever!

Pectorales.

Catarrh & Bronchitis
Pneumonia (10)
Pleurisy (11)
Pericarditis & Endoc.
Croup (12)
Laryngismus (13)
Atelectasis Pulmonum (14)
Phthisis of Childhood (15)

Gastroenterales.

Stomatitis & other Sore Mouths (16)
Thrush (17)
Aphthae
Tonguillitis
Softening of Stomach
Constipation, Colic
Prolapsus ani
Diarrhoea
~~Enteritis~~
Dysentery
Worms (18)

Neuroses.

Meningitis, (19)
Simple &
tubercular - (20)
Hydrocephalus
Convulsions (21)
Tetanus neonat.
Chorea (22)
Night-terrors
Infant. Paralysis
Imbecility

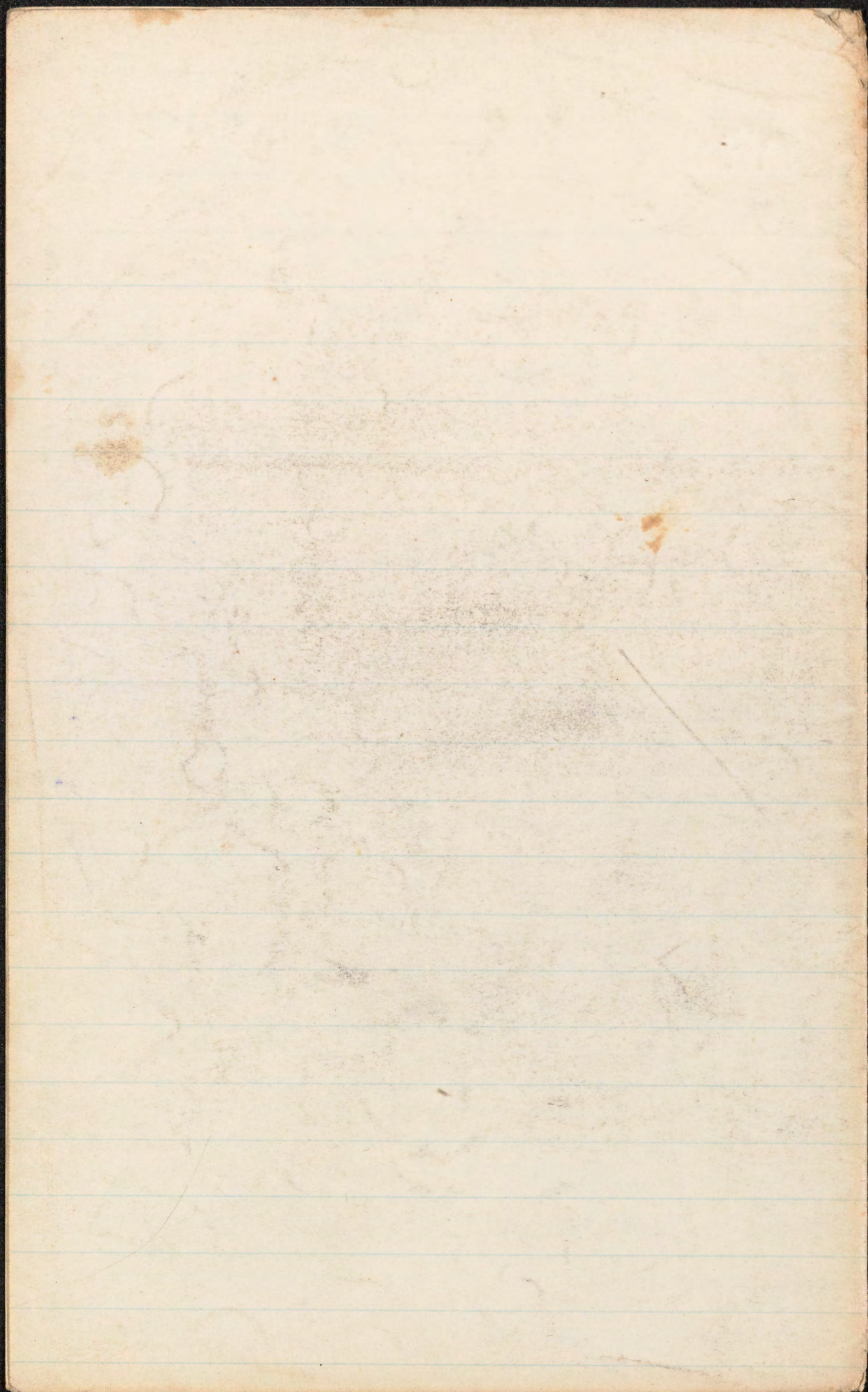
Cachexia.

Scrofula &
Cretinism
Spinal Caries,
Coxalgia &
Rickets (23)
Tuberculous mesenteric

Dermatol.

Urticaria
Strophulus (24)
Lichen tropicus
Erythema lactes
Eczema infantile
Herpes Circinatus
Impetigo
Psoriasis
Tinea Circinatus
Favus (25)
Syphilis.

Croup,
Inflammation of Brain,
Chorea
Cholera Infantum
Sore mouth



②
Principal Diseases of Children,
which need to be lectured upon.

Scarlet Fever

Measles

German Measles!
- Rubella - Rötheln

Vaccinia

Varicella

Whooping Cough

Mumps

Cholera Infantum

Typhoid & other

fevers of children
(Cerebro-spinal Fever)

Catarrh & Bronchitis

Pneumonia & Pleurisy

Croup

Laryngismus

Phthisis of childhood

Stomatitis (simple & ulcerative)

Thrush & Aphthae

Zonophyllitis

Diarrhoea & Dysentery

Colic ~

Worms

Meningitis

Simple &
tubercular

Hydrocephalus

Convulsions

Tetanus Neonatorum

Chorea

Night-Terrors

Infantile Paralysis

Skin-diseases of
Infancy & Childhood:

Strophulus

Lichen Tropicus

Crusta Lactea
(Ecz. infant.)

Herpes circin-
-atus

Impetigo

Tinea Circin-
-atus

Favus

Syphilida.

Name - Synonyms -

History -

Varieties -

Symptoms -

Stages - Incubation?

var. null.
sc. & pert. 5 or 6 d.
meas. & sump. 12

Terminations -

Complications -

Sequelæ -

Morbid Anatomy -

Pathology -

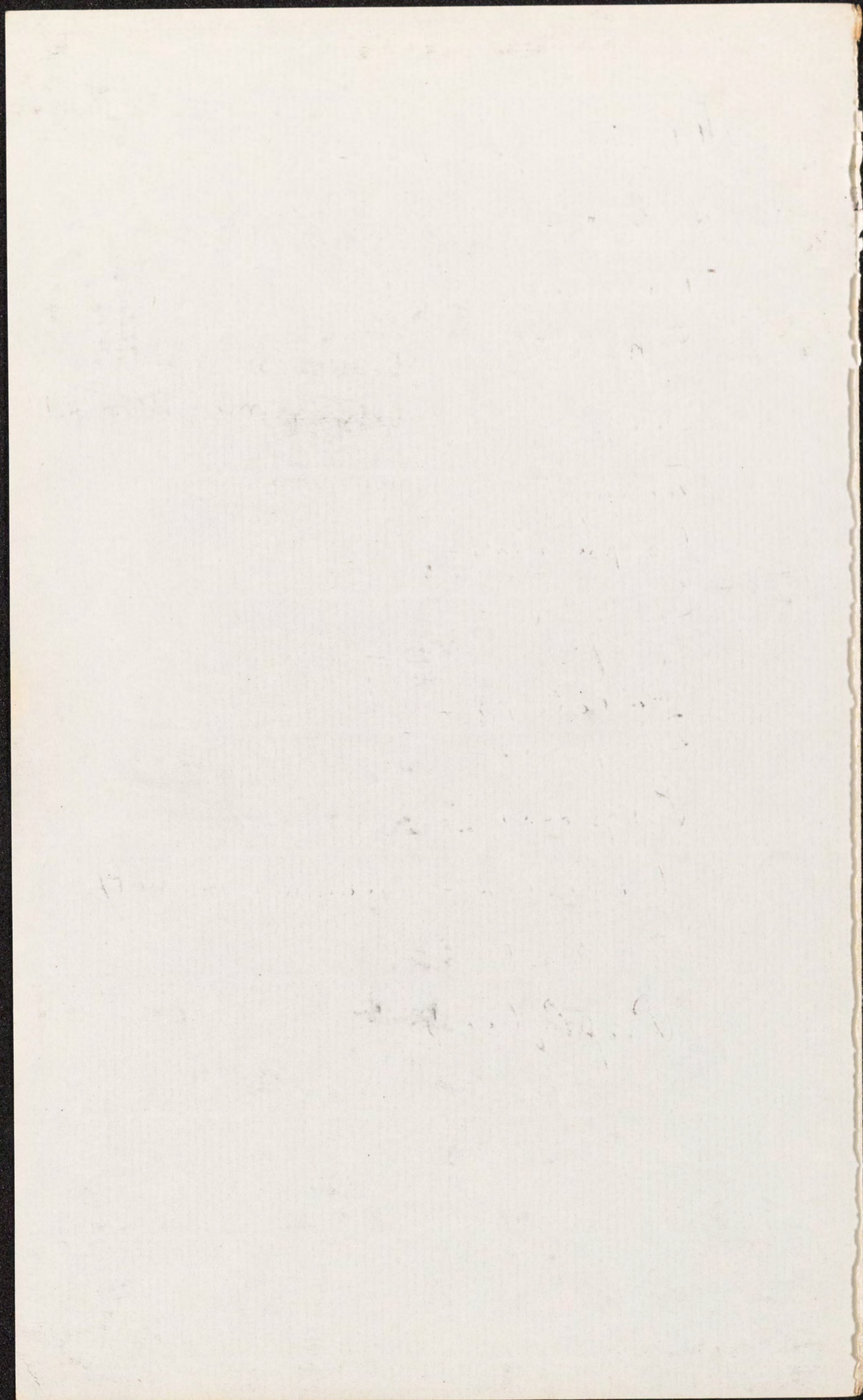
Diagnosis -

Prognosis -

Causation - (recurrence or not)

Treatment -

Prophylaxis.



Scarlet Fever

"Scarlatina" — Var: Simple, Anginosa, Malignant.

Describe a typical case of each.

Diagnosis — of scarlet fever
Measles (roseola)
Smallpox or varioloid
Simultaneous (dysenteria) dropsy —
abscess
paralysis
etc

Prognosis — Causation —

Treatment; 1st — Simple:

Cit. magnes. or Rochelle s.

Cold water — ice —

Flaxseed lemonade or gumwater —

(Cit. potass. or acet. ammon. ?)

Cool sponging — lard — glycerin —

Cacao butter —

Bathing throat — poultice, lard, or starch!

Keep within doors 4 weeks.

2nd — Anginosa:

Same laxatives — cold drinks — ice —

Leeches — then poultice — Rarely blister —

arsenic nitr. — capsicum gargle — alum —

Chlorate potass. — or permang. pot. or sod. chlorinat

Nitric acid — Quinin — T. Fern Chlor — Nourishment —

3d - allalegrant:

(2)

Hot bath - mustard - urtication?
warm bricks or bottles or bags of meal & salt
Ammonia - Hoffmann's Anod. - Whisky -
Quinine - (Salicylic Acid?) Carbolic Acid?
Chlorine Water - To form Cloud -
Purging for stupor -

Sequalar Dropsy:

Cupping & puncturing back - (not bleed!)
Lemonade - Cream of Tartar -
Digitalis - Squill - Purgatives -
as Jalap -
Comp. Sp. Jumps?
Quinine - Jaborandi? Hot air bath.

R

Sp. Jumps. Comp. et
Sp. Oth. Nitros. aa ℥ij
Tinct. Digital. m x
Oxymel. Scill. ℥ij
Syrup. Simp. q. s. ut ft. ℥ij ll.
℥. Teaspoonful three daily.

On Bellad. propyl Sc. ferri

Korff, Kunsman, &
Bernat (Hufeland), Schenk (Remy) Brett (Sintz) Br

Drinking S.C. — assert favorable experience

Rillet & Barthelemy D'Amboise approve / for

& P. Payre Parker of Charlotte & C. thinks the ex

favorable. Stillé considers further trial

Wheat, Cordie & many others think the negative is
established.

Carbolic acid — Dr. Sherrin

(Stoll & D'Amboise use Sc. ferri)

(40 of 117 com.)

(R. W.B. 46 of 87 reports in Ac. fr. hospital)

Merrill would use Sc. ferri for cerebr. congestion

Smith, salt pork & or some for sore throat, bad
Smith, new.

~~Long Beach~~
~~Mt. View~~
~~O. S. Duck~~
~~duke 1914~~

NOTE ON THE VALUE OF BELLADONNA AS A PROPHYLACTIC IN SCARLET FEVER.

BY EDWARD B. STEVENS, M.D.,
Professor of Materia Medica in Syracuse University.

ABOUT the year 1860, perhaps,—I am not quite certain as to that,—scarlet fever prevailed as an epidemic in Southern Ohio, especially so at Lebanon, where I then resided,—whole families being swept away. At that time I experimented with belladonna very fully, and, as I think, completely, carefully, and honestly. I placed children of several families very fully under the influence of belladonna; I pushed the remedy until I secured the constitutional effects,—especially the rash. When I got the eruption, I stopped the administration of the belladonna; but I

A perfect remedy for a difficulty so much complained of is, of course, a great desideratum.

Much attention has recently been given to it, and various methods have been suggested, and tried,—thus far, as already stated, without decided success. In devising plans for the purpose, one thing in every arrangement that may be proposed is essential, without a regard to which it is useless to hope for a beneficial result: it consists in *an entire absence of absorbing surface*. Material possessing this property being at command, its proper application is all that is required to overcome the long-endured reproach or trouble. To a partial extent slate and metallic coverings for the floors and walls have been tried. Both are subject to objections. Slate is dark and porous, and easily fractured. Zinc, enamelled iron, or boiler-plate iron is sometimes

AL TIMES.

[Nov. 27, 1875

did in several families at that time push the belladonna until I had these well-marked constitutional manifestations. What was the result? Simply that scarlatina invaded those families just the same; and the most fatal cases I had in that epidemic were children who had been previously saturated to the degree of eruption by belladonna. I simply note this, as I think, very positive result of an experiment as to the prophylaxis of belladonna in scarlatina. My belief is that it has no control whatever.

Nov. 27, 1875]

• MEDICAL

freely running. When the formation of pus became partially checked by the application of antiseptic lotions and ointments and a supporting treatment, I found an appalling array of bottles and boxes, the expense of which suggested the necessity of an immediate reduction of further outlay. Petroleum was then used freely, and the discharge grew less; the smell was not greater than when carbolic acid had been the dressing, the edges united under its stimulating agency, and the sores gradually contracted, healing with a firm cicatrix. The bed-sore assumed a healthy appearance after the coal-oil had been applied a few days, and repair advanced with surprising rapidity. This man entirely re

3/4 deaths under 5 yrs, - 9/10 under 15 (now 2 always). Varicella. Before vaccen., 8 percent of mortality of London.

In 1868 - only 1 death from small pox in Phila.
1 child in 3 cases fatal.

none among children: in 1861, over 700 of all ages.

In 1871, 95 deaths in the week ending Nov. 4th; largest number yet, for the year, 1876.
But, week ending Dec. 2nd 71, 233 deaths, Philada, small pox; greatest, 378.

③ Vesicles become pustules 4th to 6th day of eruption,
7th to 9th of attack. resorption
↑ ↓

④ Arcula around vesicles - declining after
they pustulate. by 8th day;

⑤ On mucous membranes, not exactly pustules;
first papules - then fibrinous or pseudomembranous
deposit - not pus usually.

② Primary fever subsides when eruption well out.
Secondary fever by 8th ^{to 11th} day comes on.

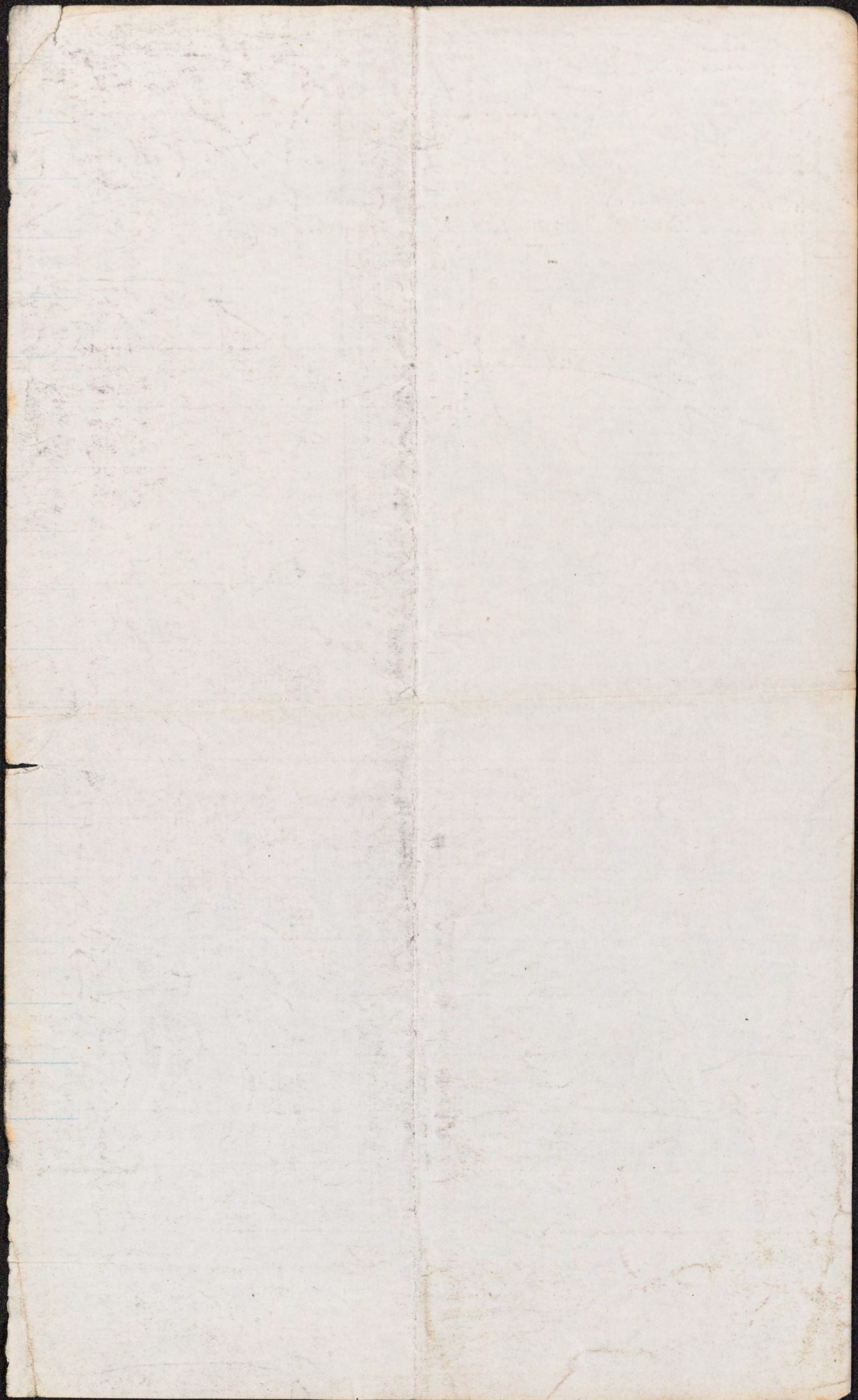
⑥ Odor on maturation of eruption.

Opoides or
chloral in most
suffering stage.
Carbonic acid,
sulphur.

① Periods; 10 to 12 days incubation - 3, primary febrile symptoms
6 or 7 coming out & maturing of eruption - 4 or 5 scabbing -

6 or 7 desquamation; about 3 weeks in all. If any diff
between children & adults, - rather more rapid in children.

after desquamation, - sometimes ulceration; followed
by cicatrization; or excretion, leaving reddish brown spots
slow to disappear; sometimes cicatrix, before scab falls - either
no pit, but deeply reddish spots. varioloïd.



ANIMAL VACCINE VIRUS.

Since that time the Dispensary has constantly kept up its public vaccination service, and has been one of the chief sources from which physicians have derived their supplies of vaccine virus.

THE NEW YORK DISPENSARY furnishes **NON-HUMANIZED**

COW-POX VIRUS (*vituline* or *bovine* virus) at the following prices :

QUILL SLIPS (half quill, charged on convex surface, at square-cut end). 25c.

CAPILLARY TUBES. \$2 00

Quill slips are the most reliable form of stored vaccine, even when sent to great distances and to hot climates ; and in cases of failure with them in *primary* vaccination, if used within one week of their receipt, and strictly in accordance with the printed directions, being in the meantime kept cool and dry, a second supply will be furnished gratis.

FRANK P. FOSTER, M.D.,

DIRECTOR OF VACCINE DEPARTMENT, *New York Dispensary,*

137 CENTRE STREET, NEW YORK CITY.

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Remit by *registered letter, postal order, or draft on New York.*

Messrs. **HENRY C. BLAIR'S SONS** have been appointed to supply the New York Dispensary Vaccine to Physicians in **PHILADELPHIA**, at Dispensary prices. It will be furnished to them regularly, so that they can always supply it **FRESH.**

FRANK P. FOSTER, M.D.,

Director of Vaccine Department.

The NEW YORK DISPENSARY, which was founded in 1790, took a prominent part in promoting the adoption of the practice of vaccination in New York. In the year 1805 the Dispensary succeeded to the business of the KINE-POCK INSTITUTION, which had been established three years before. Since that time the Dispensary has constantly kept up its public vaccination service, and has been one of the chief sources from which physicians have derived their supplies of vaccine virus.

In 1870 the Board of Trustees authorized the Director of the Vaccine Department (then House Physician) to undertake certain experiments in animal vaccination. These experiments being satisfactory, the present ANIMAL VACCINE SERVICE of the Dispensary was at once established. The stock of lymph which is maintained in this service (and which is the *only* stock now used at the Dispensary, or furnished by it to physicians) is directly descended through an unbroken series of calves from the well-known case of natural cow-pox discovered at BEAUGENCY, in France, in 1866, and has *never* passed through the human system. It is steadily propagated from one calf to another, so as to secure a sufficient supply of fresh lymph at all times.

The lymph thus produced has been largely used at the Dispensary, as well as by physicians in various parts of the country, by the Medical Staff of the *Army* and the *Navy*, by the sanitary authorities of various cities, including *New York, Brooklyn, Boston, New Orleans, Baltimore, Chicago, Buffalo, San Francisco, Albany, Newark, Richmond, Charleston, Louisville, Galveston, &c., &c.*, and at many public institutions, among which may be mentioned *St. Luke's Hospital, the Bloomingdale Asylum, the Nursery and Child's Hospital, the Dispensary for Sick Children, Manhattan College, the Northern Dispensary, the Demilt Dispensary, Bellevue Hospital, Charity Hospital, the Asylum for the Blind, &c.*, in the City of New York; the *Kings County Hospital* and *Kings County Penitentiary*, in Brooklyn; the *Quarantine Department* and the *Seamen's Retreat Hospital*, on Staten Island; the *State Lunatic Asylum*, in Utica; the *Massachusetts General Hospital*, in Boston; the *State Reform School*, in Jamesburg, N. J.; the *Cook County Hospital* and *Cook County Insane Asylum*, in Chicago; the *U. S. Marine Hospital*, in Louisville; the *Virginia Penitentiary* and the *Central Lunatic Asylum*, in Richmond, etc.

This large experience has established the following facts :

1. Vaccination with animal virus is at least as successful as that with humanized virus. It may be expected to succeed in 98 per cent. of infant vaccinations, and in 75 per cent. of revaccinations.

2. Vaccinations with lymph procured from a succession of calf-inoculations are not inferior in the protection conferred against small-pox, to those with humanized virus, or with virus direct from cases of spontaneous cow-pox.

3. Vaccination with animal virus certainly does not entail a risk of any greater degree of inflammation than is commonly met with in the use of an active humanized stock, and, in infants, the local effect is generally *less* severe.

4. Animal vaccination enables a careful vaccinator to be *positively certain* that he runs no risk of unwittingly conveying syphilis or other taints in vaccination.

5. The *amount* of vaccinal efflorescence considered necessary to constitute an effectual prophylactic against small-pox is, with animal virus, attainable with a decidedly decreased amount of traumatism, from the fact that the vesicle is large, in comparison with the size of the insertion.

6. As is now generally admitted, animal vaccination is a great addition to our sources of vaccine, and furnishes a safeguard against "vaccine panics."

DIRECTIONS FOR THE PRESERVATION AND USE OF VACCINE LYMPH.

QUILL SLIPS (Dried Lymph).—These are sent in air-tight packages. If practicable, the slips should *all* be used immediately upon opening the package. If, however, it is necessary to keep some of them for future use, they should be removed from the package and put into a *perfectly dry* bottle, provided with a *closely-fitting* cork or rubber (not glass) stopper. To insure perfect dryness of the air within the bottle, it is well to put into it, along with the quill slips, a small lump of freshly-burned lime or of dried chloride of calcium. The lump should be wrapped in cotton wadding, in order that the liquid resulting from its partial deliquescence may not come in contact with the quill-slips. If the bottle is perfectly air-tight there will be little or no deliquescence; but if, on the other hand, marked deliquescence occurs, it may be inferred that the stopper is not air-tight, and that consequently the lymph has been impaired by the influence of moist air. The bottle should be kept in a *dry, cool and dark* place. Whenever it is necessary to open it, the stopper should be replaced *without delay*.

In vaccinating with quill-slips, first moisten the charge of lymph (on the *convex* surface of the slip, at the *square-cut* end) with a drop of cold water. *The longer the lymph has been kept, the more necessary is this proceeding.* Lay the slip on a table, with its moistened side up. Then proceed to make the abrasion or scarification, using a *sharp* lancet or a number of needles set in a handle. In using a lancet, the skin should not be punctured, cut or scratched, but it should be *scraped* so as to remove the outer layer of the epidermis, without wounding the derma. The manipulation is the same as is used in erasing ink-marks from paper. When the abrasion has become *moist* (no matter whether or not it shows the color of blood), the moistened lymph should be thoroughly applied to it by rubbing it briskly with the charged end of the quill-slip *for a full minute or more.* The arm should be *kept bare* for ten minutes, but no plaster or other dressing need be applied. Infants should be vaccinated in two places—at the insertion of the left deltoid muscle, and at a point an inch or more distant therefrom on the *posterior border* of the same muscle. Each abrasion should be of about the size of a split pea. A whole quill-slip should be used for each insertion. After each vaccination the lancet should be cleansed by dipping it in alcohol, and setting fire to the latter.

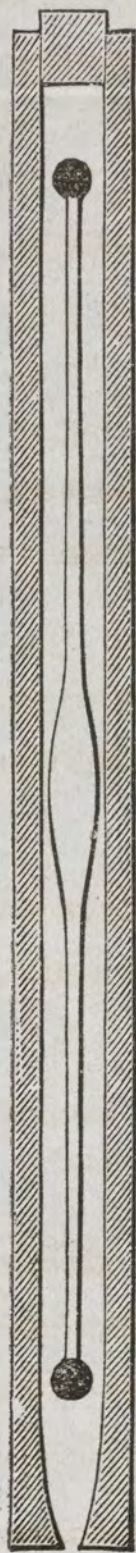


FIG. 1.

CAPILLARY TUBES.—Each tube has a central bulbous expansion. After being *perfectly filled*, it is sealed at the ends with sealing wax. For safety and convenience in transportation, it is then encased in the hard-rubber tube shown in figures 1 and 2. The rubber tube is of sufficient calibre to hold a single capillary tube loosely. Fig. 1 represents (in section) a tube encased for transportation. The rubber tube is cylindrical in shape. The bore, however, tapers at one end, terminating in a small opening—too small to permit the escape of the globular sealed end of the capillary tube. The other end of the rubber tube is closed with a cork.

In employing the instrument in the *use* of capillary tubes, remove the cork from the rubber tube, and take out the capillary tube (for which a gentle shaking may be necessary). Break off both sealed ends of the glass tube; then replace it in the rubber tube, allowing it to project (as far as the bulb) from the smaller opening of the rubber tube, as shown in Fig. 2. By applying the mouth to the large opening of the rubber tube, the contents of the glass tube may now be blown out on to a clean glass or porcelain surface. The lymph should then be thoroughly stirred up with the point of the lancet, in order that the virulent granules may be equably diffused through it. It should then be applied to the abrasions in the same way as in vaccinating from arm to arm.

When a tube has once been opened, no portion of the contents should be kept for future use.

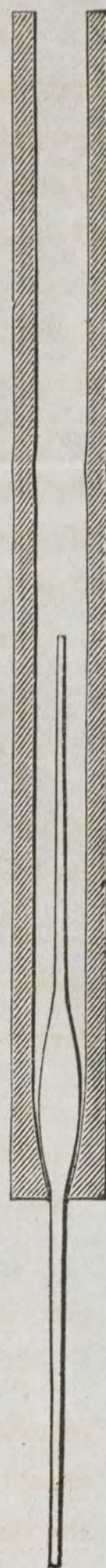


Fig. 2.

DIRECTIONS FOR THE PRESERVATION AND USE OF VACCINE LYMPH

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scratched, but it should be scraped so as to remove the outer layer of the epidermis, without wounding the derma. The manipulation is the same as is used in erasing ink-marks from paper. When the abrasion has become weak (no matter whether or not it shows the color of blood), the moistened lymph should be thoroughly applied to it by rubbing it briskly with the charged end of the quill-slip for a full minute or more. The arm should be kept bare for ten minutes, but no plaster or other dressing need be applied. Infants should be vaccinated in two places—at the insertion of the left deltoid muscle, and at a point an inch or more distant therefrom on the posterior border of the same muscle. Each abrasion should be of about the size of a split pea. A whole quill-slip should be used for each insertion. After each vaccination the lancet should be cleaned by dipping it in alcohol, and setting fire to the latter.

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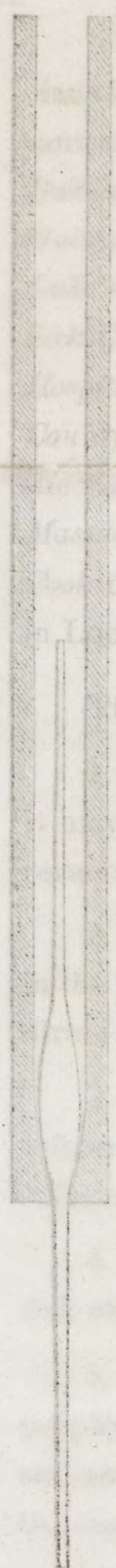


Fig. 2.

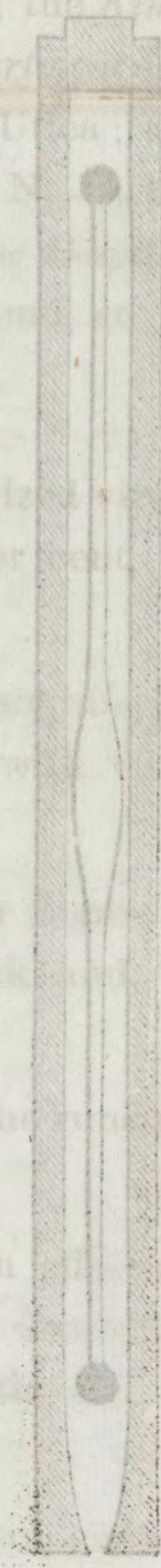


Fig. 1.

—

Beneficial Effects of Vaccination.—The Registrar-General for Scotland, in his last annual report, makes some observations on vaccination which are important. The beneficial efficacy of vaccination he attests by some striking statistics. He says:—

“ Before the introduction of vaccination into Scotland, from 12 to 14 per cent. of the total deaths were annually caused by smallpox, while nearly 2 per cent. of those who survived its ravages lost their eyesight, and a very large proportion had their countenances disfigured for life. Since vaccination was introduced into Scotland in 1799, the average annual death-rate from smallpox up to the present day has been only $1\frac{1}{2}$ per cent. of the total deaths, and even that number has chiefly been caused by the deaths of persons who never had been vaccinated. This single fact proves of itself, more convincingly than any arguments, the saving of human life which the general adoption of vaccination has effected.”—*Med. Times and Gaz.*, June 6, 1874.

attainments renders it peculiarly acceptable. I recommend it more heartily than ever, if possible, to our students, and note with pleasure its very favorable reception by the profession.

LECTURES—Just Ready.

ERIOUS IMPORTANT DISEASES.

S. DAVIS, M.D.,

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LES AND PRACTICE OF MEDICINE:

ENTS AND PRACTITIONERS.

THORNE, M.D.,

Vaccination (History & merits) Manner of performing it.
Part of arm chosen Cap - ves - areola (2 in diam) umbil - pust -
Cells (8 or 10) - height 10th day - areola, goes 1/4th day,
then scales - off 19th about.

Scar, flat - smooth, whitish, with pits or lines -
Scab, hard, dark, mahogany color, flat, round, &
if broken, less reliable (?). round; slight
indur or marked
underneath.

Keeping it (Glycerine)
Spurious, -

Don't use thin light edge.

Diagnosis - (Leitch's case!)

Time of performance - 3 mts, or earlier if d.

Occasional failure - (one 9 times!) Yet?

Theory of vaccination -

Presum. & choice of scabs -

Transfer of diseases - Syphilis?

Taupin's experiments in children's Hosp. in Paris {vacc. virus from
these having
itch, scarlatina, measles, varicella, varioloid, variola, rachitis,
scrophula, tubercles, chronic skin diseases, &c - with
no transfer. Gregory's case, - child vacc. while
having small pox; both advanced: 1 lancet charged with the
vacc. virus caused vaccinia; another, with smallp. pustule
formed in vacc. areola, caused small pox.
Nacc. after variola begins, abortive? of the attack. -

(my case near jumper & tubercles)

Revaccination.

Varicella.

Baroda
x
Vaccina

Importance of Revaccination.—There is a case on record of a woman who was vaccinated we believe by Jenner himself, who then resisted variolous inoculation, who some years after nursed her own children through smallpox with impunity, and who nevertheless, at a very advanced period of life, caught the disease from a grandchild, and died.—Lancet, June 25, 1870.

cupped or depressed appearance, as if a kind of very superficial ulceration were proceeding; but they have ultimately filled up again, and the process of healing has proceeded. The pieces of skin have only disappeared in cases where they have perished. The situations most favourable for this procedure are, Mr. Mason thinks, those where—as in the case of ulcers of

The degree of protection afforded by vaccination varies much with the manner in which the operation is performed. If properly done it is almost absolute. No child should be vaccinated in less than four places, and in the performance of this operation no physician should allow himself to be influenced by maternal sympathy. Of 6000 post-vaccinal cases of small pox tabulated by Mr. Simon, $21\frac{3}{4}$ per cent. died among those who were said to have been vaccinated but could show no cicatrix, $7\frac{1}{2}$ per cent. of those who had one cicatrix, $4\frac{1}{8}$ per cent. of those having two, $1\frac{3}{4}$ per cent. of those having three, and only $\frac{3}{4}$ per cent. of those having four well-marked cicatrices, while $35\frac{1}{2}$ per cent. of those who never had been vaccinated died of unmodified small pox.

Fourth National Bank of Philadelphia, Pa., that they are called upon to present the same. and to make legal proof thereof, to HENRY PERKINS, Receiver. at the Office of said Bank, No. 723 Arch street, Philadelphia, Pa.

72t§

H. R. HULBURD,
Comptroller of the Currency.



EIGHTH NATIONAL BANK, 1017 N

Second street.

Capital.....\$275,000 00

Surplus profits.....76,947 76

PHILADELPHIA, Jan. 16, 1872.

At the Annual Election, held on the 9th inst., the following Stockholders were elected Directors for the ensuing year:

Jacob Naylor,
James Irwin,
Jacob G. Neafie.
Charles N. Childs,
Charles H. Craige,
William King,

I. S. Custer,
Henry S. Ziegler,
James Long,
John F. Norcross,
W. W. Adams,
Jacob Grim,

A. Lincoln.

the

so conclusive, against our preferring the system on its own merits for purposes of public vaccination, that practically we have only to consider whether our own system has demerits entitling it to any considerable mistrust.

It has never been established that arm-to-arm vaccination is objectionable, and the alleged transmission of syphilis and other diseases by it is, as yet, quite unproved. It is not even shown that the specific virus of one contagion is *capable* of containing the spore of another, and until the preliminary step of showing that there is really some danger to be avoided is achieved, it would be ridiculous to incur the certainty of unsuccess in many cases in the hope of thereby avoiding an imaginary shortcoming of the existing system of vaccination.—Med. Press and Circular, Nov. 2, 1870.

Improved Test for Grape Sugar.—Fehling's test fluid, it is well known, is not very permanent, spoiling even in diffused daylight. Lowe recommends the following modification of it, which is equally sensitive, and very stable: Sixteen grammes of pure sulphate of vitriol are dissolved in 64 grammes of water. To this solution 80 cubic centimetres of soda lye, having a specific gravity of 1.34, are added at a time, avoiding any elevation of temperature, until 112 grammes have been mixed; then from 6 to 8 grammes of pure officinal glycerine are poured in till the fluid assumes a beautiful azure blue colour.—Lancet, Sept. 24, 1870.

Chloride of Aluminium.—Mr. SQUIRE states (Brit. Med. Journ., Oct. 22, 1870) that his experience with this new antiseptic (see p. 156) shows it to be of the highest utility.

“1. As a substitute for Burnett's disinfecting fluid; used somewhat more dilute than the form supplied, it was a most convenient means of disinfecting secretions in the utensils of the sick-room, and, moreover, without the danger and disadvantage of being a dangerous poison.

“2. Used of the full strength to deodorize water closets and defective drains, no great quantity was thus applied, for this use of it was considered wasteful. Not only is it better to remedy the cause of offence at once, by removing the defect, but the value of the solution of aluminium, medicinally was found to be very great.

was also a popular remedy amongst the German medical officers; opium was also employed.—Mr. HULKE referred to the great benefit which had resulted from the use of ipecacuanha in the Crimea.—Dr. WILKS reminded the Society that two centuries ago ipecacuanha had been introduced into France as a nostrum, under the name of the Radix antidysenterica.—Dr. CAYLEY remarked that the specimens shown to the Society differed from tropical dysentery in so far as the cases presented ulceration of the small intestine, looking like enteric fever.—Mr. REEVES had seen ipecacuanha used at Saarbruck and elsewhere, and one case of dysentery in which symptoms pointing to abscess of the liver were present.—Brit. Med. Journ., Oct. 29, 1871.

Heifer and Human Vaccination.—The Medical Department of the Privy Council directed Mr. Seaton to visit the various localities on the continent, where experience on the subject of animal vaccination was the most extensive. The results of this inquiry are contained in the last report, and it is there stated that the process of inoculation direct from the heifer presents many drawbacks. These, as recapitulated in the Privy Council report, are as follows:—

First, that apparently even able and painstaking operators may find it impossible to transmit successive vaccination from calf to calf without very frequent recurrence of failures and interruptions; secondly, that the transference of infection from the calf to the human subject even under the most favourable circumstances (*i. e.*, by experienced operators and with lancet direct from calf to arm) has in it such risks of failure, that, for instance, at Rotterdam, the proportion of unsuccess was nearly twenty times as great as in the ordinary arm-to-arm vaccinations; and, thirdly, that the calf lymph, as compared with ordinary lymph, is peculiarly apt to spoil with keeping, and in the form of tube-preserved lymph can so little be relied on, that the Rotterdam establishment in distributing supplies of lymph now uses only lymph from the human subject. Evidently, then, in the present state of knowledge, a system of animal vaccination would have in it an extreme uncertainty of operation; and this uncertainty would, for obvious reasons, be

No vaccinal supplies in Eng. Prussia or U. States — Marston, Seaton, Downes, &c.
all (very few cases indeed) steady & France. vide Depaul's conclusion.

Place for vaccination
Nature of vaccine

Portus
Portus

(Chenough)

Age

mostly from 1 to 7 yrs

maybe at birth!

(see fever otherwise)

3 stages - Catarrhal, Spasmodic, declining -
(not peculiar) - (characteristic) - (gradual)

1st stage about 2 weeks - 2nd about 30 to 60 days - 3rd about 2 or 3 weeks

Paroxysms - 2 or 3 to 40 in a day - sometimes 70 -

duration, 1/2 to 3/4 minutes - one (maybe) 55 minutes

(Ward, Lubb & Johnston, Sugar in all exam)

Connected with pneumonia in Dandroll
(anal. to hydrophobia in this)

Complications -

Hemorrhages -

Convulsions - Apoplexy!

Collapse of lung - (signs - in chest)

Bronchitis

Pneumonia -

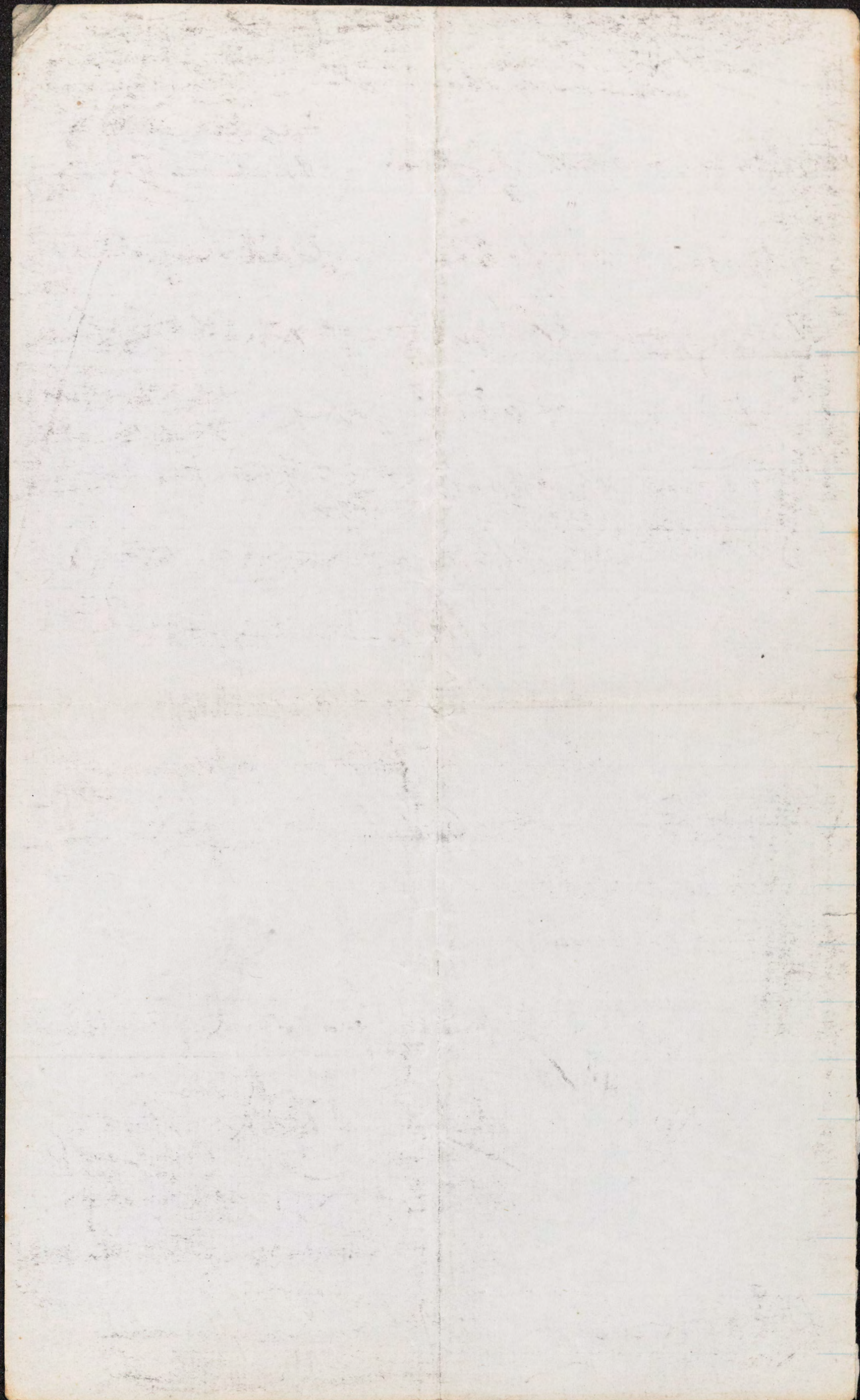
not emphysema

Tubercularization

Diagnosis, from tubercles of bronchial glands

Contagious, paroxysmal, subacute, phys. signs wanting

Watson?



Wm. H. Bond
L

Fever {

 Ephemeral

 Malarial

 Typhoid

 Cerebro-spinal

 Relapsing

 Typhoid

(2)

(Typhoid Fever for Children)

Typhus - just like that of adults.

HAVERFORD COLLEGE.

Malarial - less regular -

Cold stage, less of rigors -

sometimes convulsions -

The Managers of Haverford

Swati stage less distinct -

College will meet on Fourth-day,

More sick between paroxysms -

the inst., at half-past 3 o'clock,

Cerebro-spinal (meningitis) -

P. M., at the usual place

Month

187

Chorus -

Others -

Night-Tenors -

Fever in Children:

Typhoid Fever in Children: =

"Infantile Remittent — or Easton's fever."

Diagnosis necessary from

1. Ephermal (gastro-hepatic) fever —
a cause — & duration short — constipa. —
2. Cerebrospinal fever —
3. Malarial remittent or intermittent —
place & season — constipa. — belly flat mostly —
periodicity more regular —
4. Pneumonia —
pain in side — shorter breathy — hot trunk —
Auscult. & percuss.
5. Hydrocephalus —
slower coming — more contin. nausea — hot head —
slow coming pulse
6. Acute tuberculosis —
previous history — abd. flat — head sympt. if any less
Auscult. & percuss.

2 bursts
1 quart

Symptoms — like t. f. in adult, but

with vomiting early in many severe cases —

cough less prominent in a consid. number —

rose spots fewer & often missing (6 to 10th day)

remissions (1 or 2 daily) more decided —

Dangerous brain symptoms rather ^{especially late} more common —

Convalescence tedious, head brain very delicate —
Duration of attack 2 to 3 weeks
There are ileo-coecal tenderness & ochreous diarrhoea —

Treatment: chiefly expectant — blue mass & ipecac. —
liq. ammonii acetat. — Somet. leeches & cold to head —
poultice to abdomen — gradual cool baths — quinine — milk —
herb tea — wine.

Zymoses:

⑤ + Scarlatina

⑥ + Measles

① + Varicella

② + Varicoid

③ + Vaccinia

④ + Variella

+ Mumps

+ Whooping-cough

+ Diphtheria (no delirium)

+ Cholera Infantum (Egpt.)

+ Typhoid Fever (2 boys to 1 mile
rose-colored eruption
remissions
diarrhoea)

+ Other Fevers of Infancy (Malariæ
& Typhus
& Cerebral)

+ Childhood

Local

important

green, acid Thrush with curd-like exudate

in bad cases

stop

stop

stop

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stop

Estruals:

Stomatitis ^{erythematous} & ^{ulcerative} ^{or} ^{angrenous}

Thrush with curd-like exudate

Aphthæ ^{vesicular & ulcers}

Gonorrhea

Softening of stomach

Colic

Constipation (see prep.)

Prolapsus ani

Diarrhoea

Tabes mesenterica

Dysentery

Worms

Neuroses:

Meningitis, simple

21, tubercular

Hydrocephalus

Convulsions

Chorea

Night-terrors

Infantile paralysis

Imbecility (Cretinism, &c)

Cachexis:

Scrofula

Caries of spine

Coxalgia

Rickets

Pectorales:

Catarrh & Bronchitis (Capillary)

Pneumonia (all 3 st. may occur
acute, chronic, & abscess)

Bronchitis (may get rapidly
fatal)

Pericarditis & Endocarditis

Croup (Stomach symptoms common
abundant Heart-disease)

Ethereal Laryngismus (Marmel's case
this recovered)

Cyanosis

Atelectasis pulmonum

Phthisis of childhood

(quest)

Pt. Latency only -
Rare hemopt.
No expectora.
Little collig. smelt
Predom. broncho-pneum.

Obscure of phys. signs

Obscure of phys. signs

Obscure of phys. signs

Obscure of phys. signs

Obscure of phys. signs

Dermals:

Skin Diseases.

Symptoms



Face

Skin-temperature

" dryness

Eruption?

Tongue, & Mouth

Thirst

Throat

Pulse

Heart-action

Respirations

Cough? Expectoration?

Stomach

Appetite

Bowels

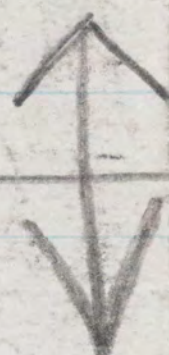
Abdomen

Urine

Brain

Convulsions?

Muscular action & strength.



Name, - Synonyms -

History

Varieties.

Incubation.

Symptoms. - Stages.

Terminations.

Complications.

Sequel &c.

Post-mortem appearances

Diagnosis.

Prognosis.

Pathology

Causation.

Treatment.

Prophylaxis.

as in the "Inoculation" experiments.

History of the disease & pathology of children
furnishes two facts of considerable importance
bearing on these inquiries;

1st Scrophulous caseous formations or degen-
erations, of glands, mucous membranes & bones
are common in children, without tubercle of initial
organs following, certainly in many cases.

This is against Buhl's receptive theory.

2nd - Catarrh & Bronchitis & even Bronchopneumonia
are much more common in children than in
adults; & yet tubercular phthisis or consumption
is rare in comparison.

This is against Meigs' &
"Catarrhal pneumonia" theory of consumption.

Conclusion: That there is a certain con-
stitution, often inherited, having proclivity to the "precipitation"
of semi-organized granular and corpuscular deposits from
the blood, - in the glands, mucous membranes & bones in childhood,

constituted Scrophula; in the membr. of the brain sometimes at same period,
tuberc. meningitis; later in life, more distinctly in lung, phthisis,
that this may occur without inflammation as a cause, & may
then produce inflammatory disturbance; while it is also not rarely
thrown down under the influence of local inflammation, especially in the
lungs. That reception is not the usual, but may be an occasional mode of origin of tubercular, in lungs or elsewhere.

Phthisis

x Measles²
x Small Pox³
x Whooping Cough⁴

Most Necessary
for Lectures.

x Croup⁵

x Diphtheria⁶

Sore Mouth¹²

Aphthae - Thrush

x Cholera Infantum⁷

Fever in Childhood

Meningitis - Simple & Tubercular⁸

Hydrocephalus⁹

Night-terrors

Convulsions¹⁰

Chorea¹¹

Tismus neonatorum

Cerebro-spinal Meningitis

Rickets (See Hays' Journal)

Scrofula

Spine Disease -¹⁴

Hip Disease

Infantile Paralysis

Colic¹³

Worms

Skin-Diseases¹⁵

For frequent colic, (Carmenaria):

R. Bicarb. Sod. ʒss.

Sp. Annon. Ac. ʒss.

Liq. Muc. Pl. S. (gr. ʒss.) ʒss.

Syr. Zingib. ʒss.

Aq. Camph. q. s. ut ft. ʒss.

all ft. ʒss.

For habitual constipation:

R. Resin Podophyll. gr. ii

M. Ext. Rhei st

M. Ext. Senn. aa ʒi

Syr. Zingib. ʒss.

Ol. Caryophyll. q. s. ut ft.

Mucil. Acac. q. s. ut ft.

ʒiv ut ft.

S. 10 drops to a teaspoonful.

Diphtheria:- in New York, November 1874,

20 deaths in two days — 66 in one week ending Nov. 14th.
In 1874, New York, 1760 deaths from Diph. = 600 more than 1873.
In ~~the~~ the ~~day~~, week ending Jan 2, 1875, 32 deaths diphtheria
group at rate of 1600 annually.

non identity: ^{Sirchov} Klemmer, ^{Oppolzer} Vogel, ^{Reut} Reut,
^{Wogge} Wogge, ^{Wogge} Wogge,
~~James~~, West, ^{Hint} Hint, ^{Land Smith} Land Smith, ^{F. B. A. Reut} F. B. A. Reut,
^{J. Solis Cohen} J. Solis Cohen — ^{Meigs} Meigs.
identity: Watson, S. Johnson, ^{Hellier} Hellier, ^{S. W. Jenner} S. W. Jenner, ^{Catlin} Catlin,
^{Adolphus} Adolphus

Croupal or Suffocative Affections In Children.

Thymic Aethna
Retropharyngeal Abscess
Larynx. Etc.

Spasm. Night Cough
Croupal Catarrh
Inflam. ^{membr.} Croup
Croupal Diphtheria

to be
discussed upon.

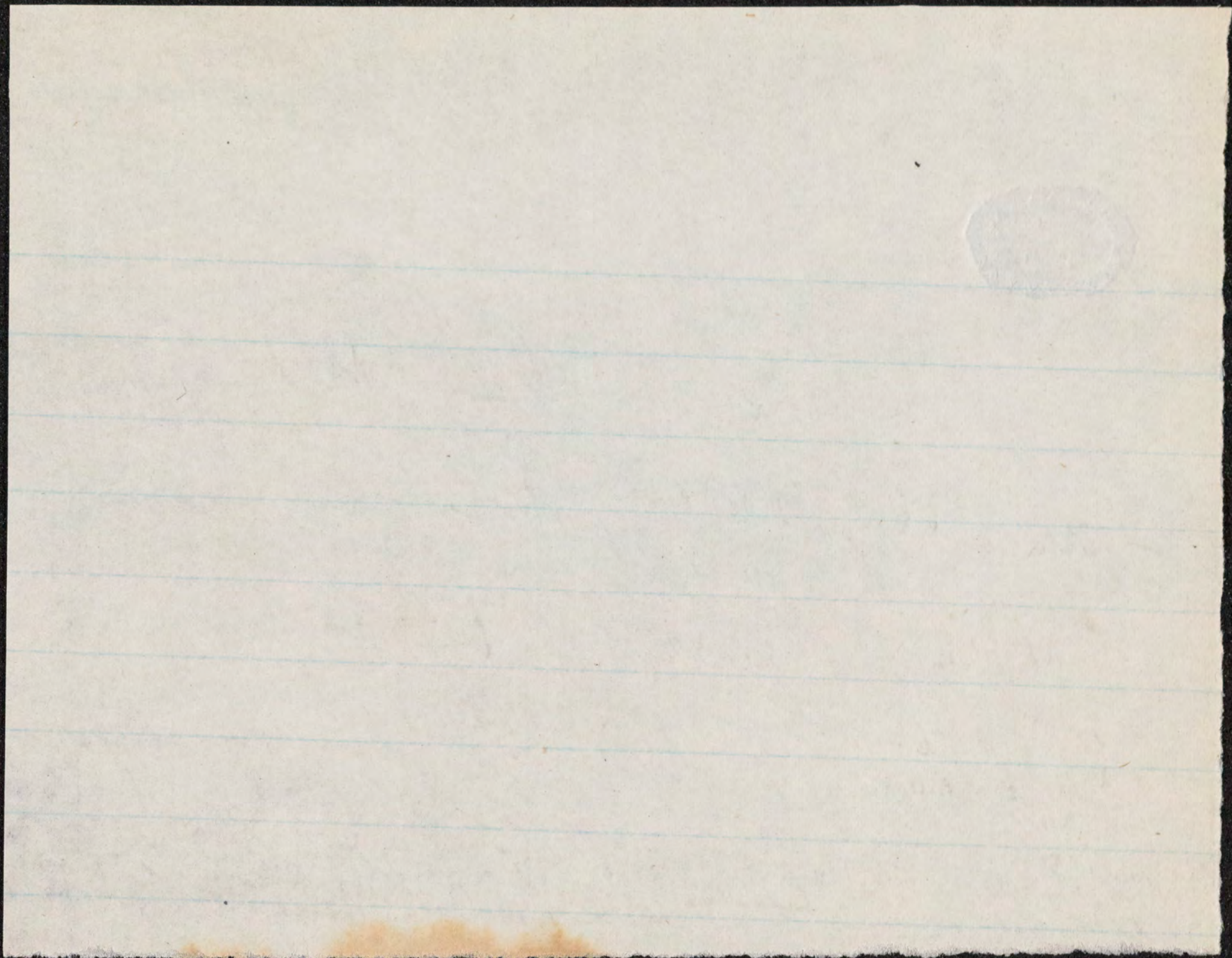
most necessary

diagnosis of children

of

In one week, that ending
Jan. 16, 1875, there were reported
in New York 73 deaths from

Diphtheria. Within a few weeks
afterwards, 100 in a single week.
about 100 cases in a week (or more) 1875-6.



DIPHTHERIA.

PROCEEDINGS OF THE PUBLIC HEALTH ASSOCIATION OF NEW YORK.

A regular meeting of the Public Health Association of New York, was held Dec. 10, 1874, at the lecture-room of Prof. Charles F. Chandler, at the School of Mines, on 49th street, between Madison and Fourth avenues, to take into consideration the present prevalence of Diphtheria. The large room was more than filled, and this first meeting of the association held at the School of Mines, demonstrated not only the interest felt by the medical profession in the objects and methods of the association, but also the perfect adaptation of this beautiful lecture-room to all the ordinary purposes of scientific illustration and demonstration.

The president, Prof. Charles F. Chandler, LL.D., occupied the chair. On recommendation of the Executive Committee, the following persons were unanimously elected active members: Jerome Walker, M.D., James C. Bayles, Esq., J. E. Comfort, M.D., and Paul F. Munde, M.D. The first paper of the evening was on:

THE CAUSES AND NATURE OF DIPHTHERIA, WITH A REVIEW OF THE BACTERIAN THEORY.

By J. LEWIS SMITH, M. D.

Dr. Smith spoke substantially as follows: Since the death of Bretonneau, some twenty-five years ago, it has been abundantly proved that diphtheria is communicable otherwise than by inoculation, for the result of numerous chemical and microscopic investigations has been to nearly demonstrate that the disease is contagious by contact with the patient, through exhalations from the surface and through his breath. And it is thought that the cause of diphtheria has been found in the existence upon the diseased parts in the diphtheritic cases, of small vegetable parasites, which are endowed with life and motion, and which have been designated *bacteria*. These parasites increase in number as the disease increases in intensity, and if diphtheritic inflammation attacks any surface which is covered by the parasites, which cause certain other diseases, such as catarrh, the parasites diminish and disappear, as though deprived of the required nutriment. And on the other hand, when diphtheria disappears, other vegetable forms may succeed. The grayish-white spots which appear upon inflamed surfaces at the beginning of diphtheria, are entirely composed of these bacteria, which have come in contact with the mucous membrane, and have adhered to it, and which, unless prevented, will multiply rapidly, and then by burrowing through the tissues, will infect the whole system. The reason why diphtheria primarily and chiefly affects the surfaces of the nose and throat is that the air which contains the germs of the bacteria constantly passes over these surfaces. The important conclusion to be deduced from these facts is that diphtheria is entirely local in its commencement, and is amenable

Notes taken by Dr. Lewis Smith, M.D., at the meeting of the Public Health Association of N. Y.

to local measures. This bacterian theory, thus established by microscopical investigations, receives some support in clinical observations from the fact that diphtheria prevails most in localities which are favorable to the development of low forms of animal and vegetable life, such as filthy and crowded apartments, along streets and alleys, and along low grounds where vegetable and animal refuse collects. Additional confirmation of the bacterian theory was found in the fact that diphtheria begins in one spot, and then may be easily treated and cured, and that it is only in a subsequent stage that it infects the whole system, and becomes a generally dangerous disease. But the speaker thought there was another factor in the propagation of diphtheria, which the advocates of the bacterian system had too much overlooked, namely, a predisposing condition of the system. This, he thought, was shown by the fact that sometimes bacteria may be found in the air of localities where diphtheria has not occurred, and in such numbers as to force the belief that they had frequently passed over the fauces in the inspired air. Bacteria are sometimes, too, found in the mouth in perfectly well persons, and sometimes, when breathed, they cause no inflammation in the lungs. These considerations, and other minor ones noticed by the speaker in clinical experience, justified, he thought, the opinion that diphtheria is, in certain cases, a constitutional malady in its circumstances, while in other cases, if not in most, it is primarily local, and only subsequently constitutional. In conclusion the speaker said that diphtheria had scarcely been absent from New York for a single season during the last ten or fifteen years; the primary form predominating during diphtheritic epidemics, and the secondary form in the intervals and during epidemics of scarlet fever and measles, it being a peculiarity of diphtheria that instead of being incompatible with other morbid processes it is likely to engraft itself upon them. He thought the disease in question might fairly be called epidemic in this city. Diphtheritic inflammation attacks by preference such inflamed surfaces as are deprived of their covering of skin, and in this he found an explanation of the frequent complication of scarlatina and measles by diphtheria. For in those eruptive diseases an inflammation is already established upon the fauces which affords a nest in which the bacteria, or diphtheritic virus, might lodge and develop. Then, alluding to the anti-hygienic conditions which produce diphtheria, the speaker said that when it appeared in New York in 1857 and 1858, after an absence of more than fifty years, some of the first and most severe cases seen by himself occurred in the upper part of the city, along the old water-courses, where, in consequence of street grading, water was stagnant, and impregnated with decaying animal and vegetable matter. In fifteen years' treatment of diphtheria, the speaker said, he had not observed an instance in which it appeared to be communicated from house to house by the clothing, as is sometimes the case with scarlet fever and measles. When it spreads from house to house, or even from room to room in the same house, it is almost always carried by the visits of persons having diphtheritic inflammation. The area of contagiousness of diphtheria is therefore confined to the room in which the patient resides.

A brief discussion of some of the pathological points advanced in the paper of Dr. Smith followed, in which Prof. Edward Curtis and Dr.

Dr. W. H. Henshaw is sure that it has found support in some cases clear of bacteria.

On May 18 treatment was recommenced. Hypodermic injections of chloral and morphia were given night and morning, as well as thirty grain doses of chloral twice daily. The morphia was gradually increased to eight centigrammes. Some improvement took place, the patient sleeping quietly by day as well as night without sickness or contraction of the pupils ensuing; but on waking, the movements reappeared.

At the end of a fortnight the movements had notably diminished; but a new symptom now appeared, viz., convulsive movements of the muscles of the larynx and the diaphragm, causing hiccough some fifteen times in a minute. These continued until July 9, when they ceased suddenly.

Choreic symptoms returned on the 22d, in consequence of emotion from the death of one of her parents. The morphia was gradually increased to sixteen centigrammes, injected thrice daily. Syrup of chloral, thirty-eight grains twice daily, was also given, but omitted, as it destroyed her appetite. The morphia was increased to twenty centigrammes up to the 30th, when it was given up. On the 31st, the patient being more and more agitated, an enema of forty-five grains of chloral was administered.

August 1. Two enemata of chloral were given; the appetite and digestion were excellent. Chloral in drachm doses, twice daily, was injected *per rectum*, and continued until the 15th, when the movements had completely disappeared, and the patient could write and sew. On the 28th the cure appeared complete, and on December 1st still remained so.—*Lond. Med. Record*, March 15, 1876.

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Non-identity of Croup and Diphtheria as shown in their Pathological and Histological Anatomy.

Notwithstanding the high authorities who maintain the identity of these diseases, we have always inclined to the belief, both from their clinical and therapeutic characters, that they are distinct affections. Mr. JOHN MOIR, in an interesting article (*Brit. Med. Journ.*, March 18, 1876), maintains their non-identity, founded on their pathological and histological anatomy. "Recent investigations," he says, "prove that in both croup and diphtheria the membrane consists largely of corpuscles; but Dr. Carpenter warns us, that 'it has been too much the habit of pathologists to speak of "coagulable" or "plastic" lymph as if it were always one and the same thing; yet it really presents various gradations of character, which are manifested in its different degrees of organizability, and in the diverse nature of the tissues developed from it.' Sir James Paget points out two typical forms, the fibrinous and the corpuscular, between which the others are intermediate; and I hold that the membrane of diphtheria partakes more of the fibrinous, and that of croup of the corpuscular character. The fibrinous exudation coagulates into a fibrous clot resembling that of healthy blood, but showing a more distinct fibrillation; the latter (the croupous exudation of Rokitansky) is characterized by the want of any proper coagulation, the fibrous clot being replaced by an aggregation of cells, which in their first appearance resemble very nearly the primordial condition of the corpuscles of the fluids of the absorbent vessels and the colourless corpuscles of the blood. In the 'croupous exudation,' the false membrane is not plastic, to no extent fibrinous even, but very largely corpuscular. Rindfleisch, the most recent observer, says 'it is not fibrous at all, but only apparently so.' Moreover, it is usually thin and soft just below the larynx; about the middle of the windpipe, more dense and firm; lower down, generally looser again, pulpy and broken into flat or tubular fragments, and never connected by bloodvessels with the surface from which it proceeds; it can be entirely detached, often with but little difficulty; in fine it is more brittle, less fibrinous, and much more albuminous than the usual products of inflammation. Mr. Campbell De Morgan, in a letter I received from him on this subject between four and five years ago, after stating his belief in the non-identity of croup and diphtheria, says: 'There is no evidence that any development goes on in the false membranes; the moment they are exuded, they are virtually dead; whereas in morbid growths, properly so-called, there is a constant development going on in the new tissue.' We find, then, that the corpuscular

is the lowest form of the 'exudation of lymph.' Diphtheria and croup are both in their false membranes forms of this nature, though not and never in an exactly similar degree; croup being a lower form, and, therefore, less organizable than the other.

"Mr. J. Warrington Haward, from his observations in St. George's Hospital and elsewhere, states his belief that 'there are two distinct combinations of symptoms, with their associated pathological changes, to one of which may be given the name of croup, to the other diphtheria; that these combinations are constant; and that the elements and terms of the one are never mixed with those of the other (though there may be certain added qualities common to both); that the constant combinations are of the important and essential element in each quantity; and that these are always occurring in the same and distinct association. There is sufficient ground for regarding each of the two diseases made up of these elements as distinct and non-identical.'

"Mr. Campbell De Morgan expresses no doubt that 'in these cases the blood is diseased, and in different manners, and there is exudation of special fibrinous material' (that is, fibrinous material special to diphtheria) 'and of white blood-corpuscles more or less changed' (in croup)."

According to Prof. Sanders, of Edinburgh, "the essential difference between the croupous and diphtheritic membranes lies in this, that the croupous membrane effects the epithelial investment of the mucous surface, whilst the diphtheritic is not confined to the surface, but is a product of the entire thickness of the mucous membrane.' And here we have the true physiological explanation of the interesting clinical fact that, whereas in diphtheria there are often epistaxis and bloody expectoration, these never occur in croup. Dr. Sanders is not alone in his observations; in Germany, similar anatomical distinctions are the bases on which the distinctive differences between the two diseases are rightly founded. The *Lancet* of March 29th, 1873, states that 'the exudation in diphtheria varies very much, and is decidedly distinct from that of idiopathic croup.' M. G. S. Empis also, in his observations at the Hôpital Necker in 1848, had noticed, and in 1850, in the *Archives Générales de Médecine*, very distinctly enunciated, that 'the mucous membrane of the trachea is the only part where we have observed pellicles adherent to a mucous membrane, without the latter having been more or less denuded of its epithelium. On whatever other part I may have had occasion to study diphtheria, whether on the mucous membrane of the lips, the tongue, the pharynx, the nasal fossæ, the vulva, etc., the mucous basement membrane was found in immediate contact with the false membrane, and the epithelium no longer existed.' Here we have a close agreement, closer could not be, between two independent and trustworthy observers, Empis and Sanders; and, not to be too long, I will only bring forward one other, whose competency will be at once acknowledged by all, Mr. Jabez Hogg, President of the London Microscopical Society, and surgeon to the Royal Westminster Ophthalmic Hospital. . . .

"This important difference between 'a fibrillated membrane prone to pass rapidly into the ulcerative process,' and 'a delicate film' which never penetrates to the deeper structures, and is thrown off very soon after formation, seems to have occurred to no one. 'I maintain that a sharp line can be drawn between the histological anatomy of diphtheritic membranes and croupous casts; and, surely, if so, it will no longer be denied that they indicate perfectly distinct and specific forms of disease. I will first glance at the general naked-eye appearance of the tracheal membrane usually found in diphtheria. As its name implies, it is a dense, compact, yellowish-white or reddish-gray coloured, well-formed mass, of from half a line to three lines in thickness. It is usually firmly adherent to the subjacent membrane, and moulded upon it, and is more or less friable; so that, on traction with forceps to detach it, it comes away piecemeal, or in a layer somewhat resembling chamois-leather. If forcibly detached, a breach of continuity of surface is made, and bleeding occurs, as the mucous membrane is always much congested. Frequently, a general tumefaction and ulceration involves the muscular tissue, and suppurating points dip down to the cartilages. By no unaided effort of the patients in the extreme paroxysm will the membrane be thrown off.

“In striking contrast, the croupous cast is semitransparent, delicate, and tender to handle, somewhat gelatinous, and of a pale yellowish colour, easily separable from the subjacent surface as an imperfect cast of the part on which it is formed. It is only after the death of the patient that it is seen to be opaque, and composed of more than one layer. It is generally thrown off during a violent fit of coughing, when the patient finds almost immediate relief from the more urgent symptoms. It is never found so intimately connected with the subjacent mucous membrane as to cause bleeding. It is simply a clean cast of the superficial epithelial layer, closely resembling the cast-off skin shed by some of the lower animals—the growing amphibia, for example.

“The histological differences are much more strongly marked. Diphtheritic membrane requires a good deal of teasing out to fit it for microscopic examination. A power of 350 diameters reveals an aggregation of granular matters, nucleated epithelium, fat-molecules, and minute crystals, held together by interspersed bands of connective tissue. Muco-purulent corpuscles often entangle foreign bodies, and in throat-affections, the spores of the *oidium albicans* are rapidly developed. The membrane is, in short, a laminated fibroid mass of the superficial and deeper seated structures, in a later stage involving the submucous tissues, muscles, glands, and cartilages. In sections made from various preparations, portions of all these structures have been well seen, and sometimes I have found considerable hypertrophy of the connective and fibrous tissues.

“A portion of a croupous cast, however, examined under the same power, consists of numerous cylindrical and pavement epithelial cells, granular matter, fat-corpuscles, and mucus with some occasional foreign bodies, as particles of food entangled in a protoplasmic homogeneous matrix. The columnar epithelial cells retain their cilia, and are filled with clear sarcode, and nucleated. It is, therefore, surmised that these casts are not long retained; probably they are thrown off soon after their formation. Fungus-spores are rarely found entangled in these films, which are characterized by an excessive cell-poliferation rather than a transudation or true exudation. Although some of the croup casts differ a good deal in colour and consistency, connective or fibrous tissue never enters into their composition.’

“These facts, which have been established by Mr. Hogg by repeated demonstrations under the microscope, and verified by Dr. Greenfield of St. Thomas’s Hospital, account, in the most satisfactory manner, for the therapeutic value of emetics in croup, and their utter uselessness in diphtheria.

“Mr. Jabez Hogg states that, with regard to croup, there is always one point in its etiology which appears to me not to have received much attention; and yet it is of some importance, as seeming to separate it very widely from diphtheria. I refer to its peculiar hereditariness. I have seen several well-marked instances of this; and I am now attending a family for an affection (strumous) of eye, in which croup has gone down to the third generation, affecting the males of the family in particular. No one ever heard of diphtheria having been transmitted from father to son, or from mother to daughter, that I am aware of.”

Antiseptic Treatment of Diphtheria.

Dr. Post reported to the Obstetric Section of the New York Academy of Medicine (*Med. Record*, April 8, 1876) the case of a patient whom he was called to visit in the morning, a boy 3 years of age, who had very considerably swollen tonsils, with diphtheritic patches upon them; considerable mucous discharge from the nasal cavities; and glandular enlargement with tenderness at the angle of the jaw. The doctor at once prescribed bromine with bromide of potassium, after the following formula:—

R. Potass. bromid. ʒj.
Aquæ, ʒj. M.

Dissolve in the solution of bromide of potassium, twenty minims of bromine.

Of this mixture administer gtts. x in a teaspoonful of water every hour.

The nasal cavities were hourly washed with a solution of common salt in water, a teaspoonful of salt to the pint of water; and one grain of sulphate of quinine given in solution every two hours. To these were added a tablespoonful of milk-punch every hour.

In the evening the patient was found breathing with much greater ease than in the morning, and was sitting up in bed.

This single case simply showed something for the disinfectant plan of treatment.

Dr. Post also referred to another boy, æt. 9 years, who had the disease much worse than the boy just alluded to, and the solution of bromine with bromide of potash was applied by means of a swab, because the patient made no resistance, as was the case in the other patient. In other respects, the treatment was the same. In the latter case also there was marked improvement at the second visit; and at the end of four or five days the patches of diphtheritic exudation had all disappeared and the patient was fairly convalescent.

Three weeks subsequently, the boy had double vision, which was treated by the use of strychnine in $\frac{1}{60}$ gr. doses thrice daily, and complete recovery followed.

There was another child of the family at that time, and he was removed from the house. He, however, was attacked with diphtheria a few days afterwards; and, apparently, was no worse than the boy who was under Dr. Post's care, but the case proved fatal.

Dr. CARO remarked, regarding the use of bromide of potassium in the treatment of diphtheria, that it was his main reliance, and had been for the last fifteen years. The doctor maintained that there was nothing which dissolved the membrane with greater certainty than this drug. He employed it in solution of the strength of one drachm to the ounce of water, and commonly applied it in the form of spray. Whenever the breathing became dry, he at once resorted to the spray for a few moments, when the child usually commenced to breathe more freely, and, in many cases, coughed and threw out patches of membrane. He recommended its early use, as there was no more efficient method of relieving capillary congestion.

On the Combined Use of Morphia and Atropia in the Treatment of Spasmodic Asthma.

Dr. G. OLIVER reports (*Practitioner*, Feb. 1876) the case of a lady, aged 30, who suffered intensely from spasmodic asthma, and who obtained marked relief from the hypodermic injection of one-third of a grain of acetate of morphia with one-hundredth of a grain of sulphate of atropia. The subsequent history of this case has shown these points of experience:—

1. Morphia and atropia are superior to morphia alone; the good effect is more speedy and complete, and they produce no depressing gastric disturbance.

2. During the first year of subcutaneous treatment the asthmatic paroxysms were, as a rule, met by the injections as soon as relief was urgently demanded. The patient struggled on with her attacks before calling in her medical attendant, who, only then, injected the remedies. While these attacks in mid-career were always quickly brought under control, they—as severe asthmatic paroxysms—notwithstanding the continued use of the injections, required time for complete and safe subsidence. While thankful for a means so effectual as this in quelling the violent storms, my patient sought for further benefit by attacking the earliest approach of them by the injections. This combined prophylactic and curative use of the remedies has been resorted to during the last three years, and, during this long period, there has not been one severe attack as in former years. At the very onset of bronchial disturbance, an injection night and morning for a few days together has usually kept the threatened asthmatic spasm in abeyance and apparently stamped out the beginnings of an attack of the old type. Besides this, the patient asserts there is less suscepti-

In sore mouth: Chlorate of potash — Magnesia
Rum water — flavoured tea — Ice

Glycerin & water — Borax & sugar — Chalk & gum
glycer — & chalk — ^{tinct. myrrh - 3 1/4 in 3i} Sulph. copper — or Zinc
chlor soda — ^{menthae oil & Symp} perway. potash — ^{9th in 3i} Creasote in
glycer — ^{3 1/2 in 3i} Sod. sulphite — ³ⁱ milk & butter &
Rum & Chloroform mixture

Diseases of Children

(Last Part.)

1873 - 4 - 1/30/74 - finishing Scrofulous
meningitis — left to treat of, Convulsions,

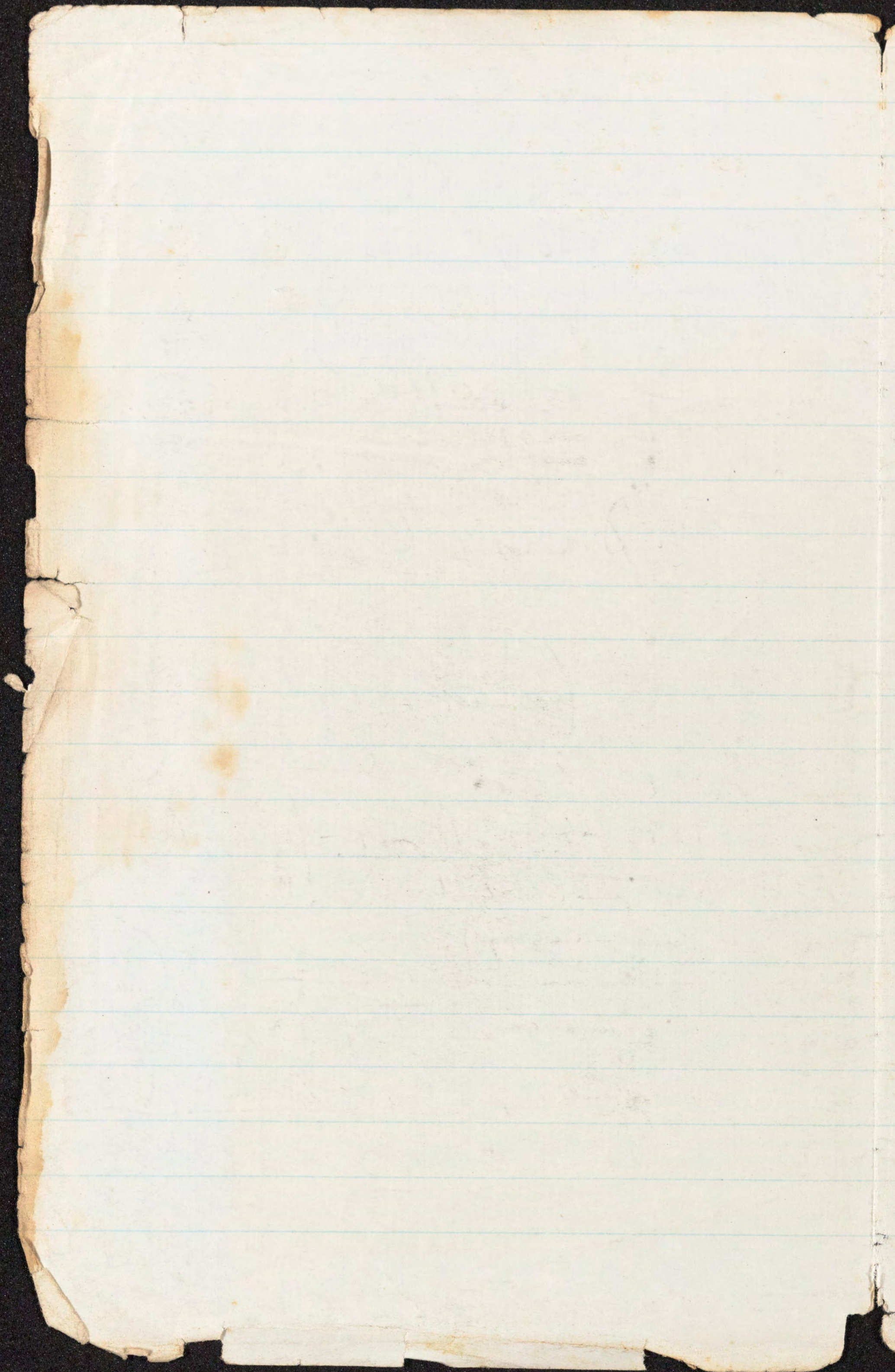
^{reflex} Trismus nascentium, ^(spasms: - ice to spine)

Sore mouth (viz.

Simple, ulcerative, gangrenous; aphthae; thrush ^{or all} ^{or all} ^{or all}

Cholera Infantum; Skin Diseases in Children;

Constipation & Colic.



the preference over inhalations of the spray of lime-water, though I have seen good effects from the latter, and sometimes alternate the two methods. If the lime does not appear to suit the case, or if its good effects are not continuous, inhalations of the warm spray of bromine, a grain to the ounce of water, with a grain of the bromide of potassium, are substituted. Should these likewise prove inefficacious I use the sulphurous acid spray. If the laryngeal symptoms increase, and asphyxia is to be dreaded, I advise tracheotomy as soon as there is marked inspiratory incurvation of the intercostal, substernal, and suprasternal tissues, without waiting for the period of cyanosis, provided that no respite is procured by the inhalations, or by the action of emetics.

I am inclined to regard saturation of the atmosphere with steam* as one of the most valuable elements of the treatment of diphtheria in the presence of exudation in the air-passage; the object being to supply to the exudation an abundance of water to replace that which is lost by evaporation or coagulation in its transformation into membrane, and thus favor its detachment and expectoration. With this view I often keep up a continuous evolution of steam so great as to loosen the wall-paper in papered apartments.

Oertel,† a recent authority of some notoriety, places his main reliance in this agent in the treatment of diphtheria in the stage under consideration, with the view of promoting abundant suppuration beneath the adventitious membrane to loosen it, and preventing the propagation of the cryptogamic growth, which he states cannot penetrate into the tissues through the layers of pus.

There are a variety of expedients for obtaining a sufficient evolution of steam. If there is a stove in the room, a vessel of water containing small articles, such as handkerchiefs and napkins, may be kept boiling. If this be insufficient, wet cloths may be hung up about the room and be changed from time to time. A wash boiler may be brought into the room, already filled with boiling water, and an attendant stand by it lifting out articles of clothing on a stick, and then immersing them and lifting them again, keeping it up all the time. A second vessel should be ready to replace the first one as soon as its water fails to furnish sufficient steam. Buckets of water may be brought to the bedside, and hot bricks or bits of heated iron dropped into it. Water may be poured over a hot shovel now and then to get up a sudden copious evolution of steam for the moment, and so on. A tin kettle may be altered so that a long wide spout is let into its side high up, to direct the steam towards the mouth of the patient, and can be fed by an alcohol lamp or one of the cheap gas stoves in common use in cities. If a funnel-shaped tube is soldered into the cover so as to dip down into the water, the supply of steam will be more copious. This croup-kettle is inexpensive, and may replace the more perfect instrument. The air of the apartment should be kept well ventilated by an open window in an adjoining room or staircase, a screen formed by a sheet hung over a line being placed in front of the door of communication, or around the bed to screen the patient from draught. If the room is large, the bed may be brought close to the stove, and sheets may be hung round it so as to retain the steam in its vicinity. The temperature of the apartment may be maintained at 80°, 85° or even 90° F. This steaming is kept up

* Wanner; *Du Croup et de son traitement par le vapeur d'eau*, Paris, 1834.

† Ziemssen's *Cyclopædia*, New York, vol. i. p. 675.

night and day as long as there is any occasion for it, the amount of heat and steam being then lessened gradually.

In order to assist in the early destruction of the membranes, and to afford inlets through them for the penetration of the watery vapor, I resort to the vapors of slacking lime as recommended by Dr. Geiger, repeating the process every hour or so, or whenever the character of the respiration indicates impediment due to the presence of membrane or its reproduction. Hot water is poured upon small pieces of unslacked lime in any convenient vessel. A large piece of stiff wrapping paper, folded into a funnel-shaped cone, or a stiff paper bag with one corner cut off, and inverted over the vessel serves to direct the vapor towards the mouth of the patient. The patient must not be brought too close to the hot vapor, and his eyes may be protected by a cloth or the hand of the attendant. The ebullition of the lime in slacking forces numerous minute particles up in the steam that rises from the vessel, and are taken with it into the air-passages. It may be that the lime does not act chemically on the membranes, and merely wedges them up mechanically here and there, permitting better access of the aqueous vapor; but that it acts beneficially in forcing the expulsion of shreds of membrane, casts, and the like, there is no doubt.

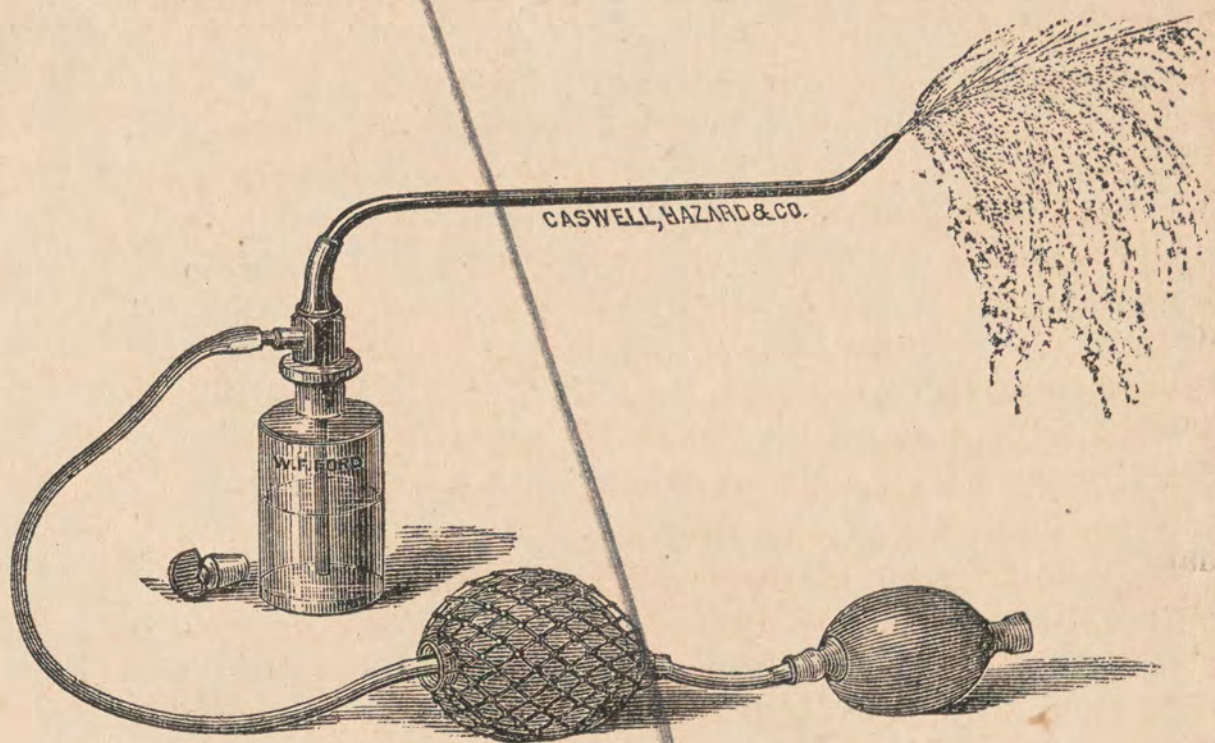
This treatment is likely to induce a catarrhal pneumonia, but if it saves the patient from the immediate dangers of suffocation, that is a secondary matter to be attended to subsequently. I have seen numbers of children saved by this treatment, who, to the best of my judgment, would have perished without it; some of them being cases in which it was believed that tracheotomy held out no chance of a successful termination.

THE SPRAY TREATMENT FOR INFLAMMATIONS OF GENITO-URINARY TRACT.

By E. BRADLEY, M.D.,

NEW YORK.

In a paper which I read before the New York Medical Journal Association, a year ago, I called the attention of the profession to the use of "the spray"



in the treatment of inflammations of the bladder, vagina, and womb, and presented an instrument which I devised, and had been using for some time in the treatment of those diseases.

Since that time I have used the instrument very extensively, and have found it of so much service

1874-5-

Before end of Jan. had extensive
Scarlet fever, Measles, Smallpox &c,
Chickenpox, Mumps, Whooping Cough,
Fever in Children (except Cerebro spinal)
Diphtheria, Croup; also Simple Meningitis.

Left: Scrophulous Meningitis -
Hydrocephalus - Tetanus ~~nerve~~

Pectoral
affections in
Children
Catarrh - Cap. Bronch
Pneumonia
Pleurisy
Phthisis
Peri Endocarditis

Convulsions - Night Terrors
Cerebro spinal fever
Infantile Paralysis
Lamprosomus Stridulus
Chorea
Stomatitis - aphthae

Thrush

Stomach & Bowel Affections -
Constipation Diarrhoea - Dysentery
Colic Worms Tubercles Mesenterica
Cholera Infantum
Osteomalacia Rickets

Woman's Medical College of Pennsylvania,

North College Avenue and 22d Street,

PHILADELPHIA.

I was quite interested in an article in a late number of the *Times*, from Dr. Comegys, on summer-complaint. Cholera infantum is considered by many of our physicians as a heat-fever. The nervous system of the child, being very delicate, feels the full force of the extreme heat, and the vomiting and purging are only evidences of disordered nervous action, and not indicating inflammation of the stomach and bowels. Two forms of the disease are recognized,—the congestive and the syncopal. The former is the most dangerous, and requires the copious use of cold water externally and quinine internally. The syncopal requires quinine and stimulants, given in small and frequent doses. After the urgent symptoms have passed, bismuth may be used should the diarrhœa persist, but I have seen many cases, apparently dangerous, promptly relieved by quiniæ tannas, gr. $\frac{1}{3}$ —j; elix. valerian. ammon. (not Hubbell's), gtt. v—xx, every two hours. I think the success with this mode of treatment is greater than with the old calomel, chalk, and astringents. Of course, the large majority of our physicians adhere to the entero-colitis pathology, and treat accordingly.

mutual benefit associations, and that it has been the custom for physicians to agree to serve them by the year at "five, ten, and twelve cents" a visit, as the case might be. At the meeting it was announced that all the holders of such positions had tendered their resignations. If the profession keep together, no doubt the practice of contracting with associations will be done away with. Probably this is the best solution of the question; but we have often wondered whether it would be possible to regulate, by a stern professional law, the "contract system" without abandoning it. It certainly would be better for an impecunious doctor to attend at fifty cents a visit by contract than at \$0.00 without contract.

THE Royal English Commission appointed to consider the subject of vivisection is composed of Lord Cardwell, Lord Winmarleigh, Mr. Forster, Sir John Karslake, Mr. Erichsen, Prof. Huxley, and Mr. Hutton. The London *Lancet* says of them

kill, at no great distance, hinted of malarial influence. The dietetic supplies for the mother were coarse and inappropriate, and she, having passed her labor without mishap, had abandoned her bed on the fifth day. She was a blonde, with freckled, sallow, pock-marked face, and large blue eyes, of medium size, tolerably well developed, but one whose form, bride as she was of a year, spoke of tangents and secants,—i.e., angular. Her age was twenty-two years.

The husband, one year her senior, was of medium size, brown hair and eyes, and most powerfully developed,—a condition which his labor as carter promoted and maintained. His health was perfect, but he had lost several fingers of his right hand by a circular saw in March, which accident had greatly shocked and distressed his wife,—then five months pregnant,—and had diminished their resources somewhat.

The first thing that attracted attention to the patient was the peculiar facial expression, and the intensely congested condition of the whole surface of the body. The skin was dry and hot. He lay upon his back, with head retracted, and eyelids so firmly closed as decidedly to resist attempts to separate them. The pupils were dilated, and did not respond to light; the lips were pressed firmly against the gums, making the mouth a slit about a quarter of an inch wide in the middle; the corners of the mouth were slightly drawn downwards, the tongue was pressed between the gums anteriorly, and foaming saliva filled the aperture, constantly flowing inwards and outwards during inspiration and expiration.

The lower jaw was so firmly fixed by its muscles that I could not move it by exerting all the force I dared to use. A space existed between the gums just sufficient to permit the introduction of the end of my index-finger. It seemed just wide enough to contain the teeth, had they been developed.

The patient's bowels had not been moved for eighteen hours, and he had not taken any nourishment since the beginning of the attack. The nostrils were dilated and immovable. The arms were drawn inwards, so that the elbows were within the marginal line of the body and could not be drawn outwards by the exercise of much force; the forearms were strongly pronated, flexed at an angle of 130° on the humeri; the hands were slightly extended, abducted, and brought nearly together at the middle line, with the fingers clenched and the thumbs *outside* of the fingers. This position of the thumbs is normal during the latter part of intra-uterine life, and is not departed from during the earlier weeks of external existence, because it requires time for the flexors to relax from their constrained ante-partum condition, and for the extensors to gain power to overcome them and produce equilibrium. The positions of the arms reminded me strongly of the pugilistic attitudes of children when they first mimic their elders.

The thorax was elevated and rounded, as at the end of inspiration, and remained so; while the abdomen was projected and tympanitic. The thighs were only slightly flexed on the pelvis, and

the legs on the thighs. The feet were extended extremely, and strongly abducted, and the inner malleoli were almost in contact. The great toes were abducted from the other toes, which were flexed, but their first phalanges were extended on their metatarsi.

Some one has said that the arm should be studied with the palm upon the ground, and pronated, in a position representing the fore-leg of a quadruped. If this patient's arms had been so placed, we would have found, upon comparison with the legs, that corresponding groups of muscles in the two members were affected in like manner and degree, and that in those groups which are most used and most powerful in life the tension seemed greater, while, all the muscles being contracted, the positions of the bones (other things not interfering) indicated the balance of power,—the resultant of all the forces.

The muscles were everywhere in tonic contraction, yet every moment there would occur a quick jerk, a letting-go-and-taking-hold-again movement, apparently from renewed nerve-irritation, which caused more rigid tension. If this movement were to be represented in diagram, it would not differ much from that of the healthy pulse as indicated by sphygmographic tracings. The infant's respiration was 50 per minute, very short and superficial; the expiration instantaneous, and he struggled for breath with his lungs full of air, like a patient with severe emphysema. The pulse was 140 per minute, thready, or, rather, corded, and distinct. He could not close his lips around the nipple, or swallow any liquid from a teaspoon, and every attempt with either only increased the violence of the spasms. He cried in an irregular whining manner, and remained in the spasms for ten minutes. Upon examining the umbilicus, the cause of the mischief was immediately apparent. There existed a hernia about the size of an English walnut, with thin walls, much congested, the redness forming an areola around the retracted and inflamed cicatrix of the funis. Pressure applied to the umbilicus only elicited most distressing cries and a more rigid contraction of the muscles. From careful examination I felt certain that the inflammation extended along the vessels of the cord inwards. Upon reducing the hernia, the spasms ceased immediately; and upon letting the projection occur again it immediately supervened. Here was an important fact in reference to the etiology of the disease, as well as a hint to the doctor. I kept the hernia reduced, and put him to the breast. The moment his lips were pressed against the moist nipple, the spasm returned again. A salt-and-water injection brought away a yellow stool of moderate quantity; a warm bath was given; the umbilicus was dressed with cerat. plumbi and carbolic acid upon a pad, kept in place by a bandage, to keep the hernia reduced. After this the spasm yielded, and a little milk was swallowed from a teaspoon several times, when suddenly a puff of wind from a rising storm came in at the window upon the little patient, and he went off into another spasm. Three powders, each containing res. scammonii gr. $\frac{1}{8}$, and hydrarg. chl. mit. gr. $\frac{1}{4}$, with sugar, were ordered,

one to be given every two hours, and potass. brom. gr. ii, in solution, were directed to be given every alternate two hours.

The next morning, at nine o'clock, I found the patient had been convulsed part of the night, had not slept, but had taken medicines, and some milk from the spoon. He could not close his mouth upon the nipple, and the attempt intensified the trismus. Bowels had moved freely. The facial expression and spasmodic condition were the same. Cheeks were cool and cyanosed, the cerulean hue somewhat mixed with erythema of the skin extended over the trunk. Sudaminae over the neck and breast. Umbilicus felt and looked cooler and better. Respiration was 90 and the pulse 150 per minute. Ordered ext. physostigmæ, gr. $\frac{1}{48}$, sod. sulphit. and quin. sulph. ãã gr. i, in solution, to be given every two hours; ungt. belladonnæ to be applied to the spine, and the nourishment with brandy to be pressed. The third day friends reported that the patient had been very bad all the day before, but had passed a quieter night, and taken medicine and food as directed. General appearance was much the same. The intervals between the spasms were more frequent and more prolonged. The cyanosis was more marked over the extremities, and the cries were more feeble. Respiration was 106 and pulse 180 per minute. Hernia was still reduced, and doing well. When the child was put to the breast, spasm came on, but milk given in the spoon was sometimes swallowed, sometimes rejected. The tetanic symptoms were better, but patient was becoming weaker. During the spasms a white fluid (milk) was regurgitated from the stomach freely, so that what was gained between spasms was lost during their continuance. Treatment was continued, but the physostigma was increased to gr. $\frac{1}{24}$ every two hours.

The fourth day I found the child in convulsions, which had been very bad since the previous evening, so that no nourishment or medicine could be taken. Fæces and urine had been voided during the night. Face looked old, wrinkled, and blue. The surface of the body everywhere was sodden and dark from venous congestion. The jactitations of the muscles kept fists moving comically. Limbs resisted forcible attempts to change their positions. Arms drawn outwards a little, sprang together again when released. Umbilicus looked almost well, but I squeezed out a drop of pus from below the cicatrix. Oral aperture was filled by saliva and the point of the tongue. Eyelids were closed, but pupils dilated. Respiration was 130 and pulse 200 per minute; the latter determined imperfectly by ear over the heart. Continuous convulsions existed till 5 P.M., when the child died. Parents would not permit a post-mortem. These cases being so rare, I took my notes by the bedside, that the data might be reliable. I desire attention to the following summary. The bad hygienic conditions surrounding the case, the fright of the mother at the fifth month, and the pathological condition of the cord, may all be regarded as causes: the first two predisposing, the last one exciting. The attack came on between the third and tenth days, which is the rule.

The convulsions affected the whole of the muscles at once. There was little opisthotonos, because the ante-partum flexion had not yet been counterbalanced. There was eagerness but inability to take the breast, except during the relaxations or intervals; and even then the act seemed to excite spasm quicker than any other. Food and medicine were given and retained during the earlier intervals, but regurgitated during spasms later. Pulse was accelerated when first seen, and increased much as the disease progressed; contrary to the statements of authorities, "that it is diminished." The bones of the head were not displaced, and no diarrhœa occurred. The whole duration of the disease was eighty-nine hours. When the hernia protruded, convulsions came on immediately; when the tumor was reduced, they temporarily ceased: this, in connection with the inflammation of umbilical vessels and the drop of pus, excludes pyæmic and centric causes, and brings out clearly peripheric irritation as the principal factor. It will be noticed that my therapeutics were directed to all three. My next case I shall treat in the main locally.

3729 LOCUST STREET, WEST PHILADA.

W. H. Winslow, M.D.

REPORT OF AN OPERATION FOR LACERATED PERINEUM—UNION FOLLOWING FAILURE OF THE ANAL SUTURE.

BY J. J. MAGUIGAN, M.D.

MRS. McF., a healthy young woman, 23 years of age, was confined in a small village in the State of Michigan, at full term. The presentation was cephalic, occiput front. During the long, difficult parturition the perineum gave way with a violent pain which expelled the head, the rent extending through the sphincters into the rectum. The child was dead.

The accident entailed incontinence of flatus and fæces. With this disgusting infirmity upon her she again became pregnant. In due time I delivered her in this city, without accident, of a healthy male child.

Six weeks after the parturition, I undertook the operation, in which I was kindly assisted by Drs. Wilson, Buckley, and James A. Maguigan. Her bowels were unloaded the preceding day with a dose of castor-oil, after which a two-grain pill of opium was given. Being thoroughly etherized, she was placed in the usual lithotomy position. The operation was rendered extremely difficult by the absence of one of the attendants expected, and was fitfully and hurriedly performed. The vaginal surface of the septum was freely denuded of its mucous covering for an inch of its extent. The lacerated surfaces were next pared off, the incision commencing below and taking off a thin border from the labium. In breadth it extended to the vaginal mucous membrane. Three sutures of silver wire were employed. The needle, armed with the first suture, was made to enter three-fourths of an inch from the margin of the wound just below its lowest point, and, traversing its entire depth, was brought out on the middle of the septum, just above the line of denudation. The needle, being now disarmed, was withdrawn and made to enter on the opposite side at a corresponding point and to emerge on the septum close to the first. Now, the evident design of this thread is to draw tightly together the vaginal septum and the oval extremity of the wound and hold them in this close contact until the resulting

The parents occupied a very small room, with one window and door, in the second and upper story of a house upon the southwest side of which the heat on that July day was very oppressive, even after sunset. The perspiration ran from my face in streams while I made the examination. In this room had occurred her accouchement. Below was a low grog-shop; around the house the gutters were full of stinking slops and kitchen débris, and the Schuyl-

§ Tanner, Signs of Pregnancy, London, 1860, p. 18; also London Medical and Surgical Journal, vol. iii. p. 687.

|| 40 Law Journal Rep., N. S., 380.

¶ Taylor's Principles and Practice of Medical Jurisprudence, London, 1873, vol. ii. p. 306.

Testis of Perforation

she bore her last child. Valescus de Tarenta was a native of Portugal, born in 1382, and practised medicine in Montpellier, France. His work, "*Practica quæ alias Philonium dicitur*," can be found in that remarkable and valuable collection of medical books, the library of the New York Hospital, and perhaps some one who can read mediæval Latin with facility may take the trouble to ascertain exactly what he did say.

The weight of the great name of Haller has been

* *Cyclopædia of Practical Medicine*, London, vol. iii. p. 491; also *Montgomery on Pregnancy*, Phil., 1857, p. 260.

† *Change of Life*, 2d ed., London, p. 18.

‡ *Epistolæ Medicinales*, Venet., 1549.

OPHICAL SOCIETY.

at 7 o'clock on Friday Evening,

R 19, 1869.

BUSINESS.

and Council submitted.

Vegetables

ETY.
Evening,
Last Lecture
on Dec. 7

Chorea:

Descrip.

Age - 5 to 15, most about 10 years: rare in adults.

Prognosis - 6 weeks average - sometimes chronic -

Causation - Anemia - Nervous debility - Fright -

Rheumatic fever (with cardiac infl.)

Treatment - Iron - Camifuge - Arsenic -

Tr. Nuc. Vom. (gtt. i to iv) - Salt baths -

Electricity (carefully) - Gymnastics -

Sea air - Mountain air - Good diet -

Cod liver oil

Chorea

Stomatitis

(Aphthae)

Thrush

Constipation

Colic

Prolapsus Ani

Dysentery

Mucous Disease

Worms

Skin-diseases:

Spinal Disease -

2/9/75 - exten. applica
Argemone -
Chorea - rheumatic; cerebral embolism?

Chol. Infusion - Nit, Silver - Lumine bottle -
broader beef-tea - chills both - ham -
whisky

Sore mouth - (see paper)

Constipa.

Colic

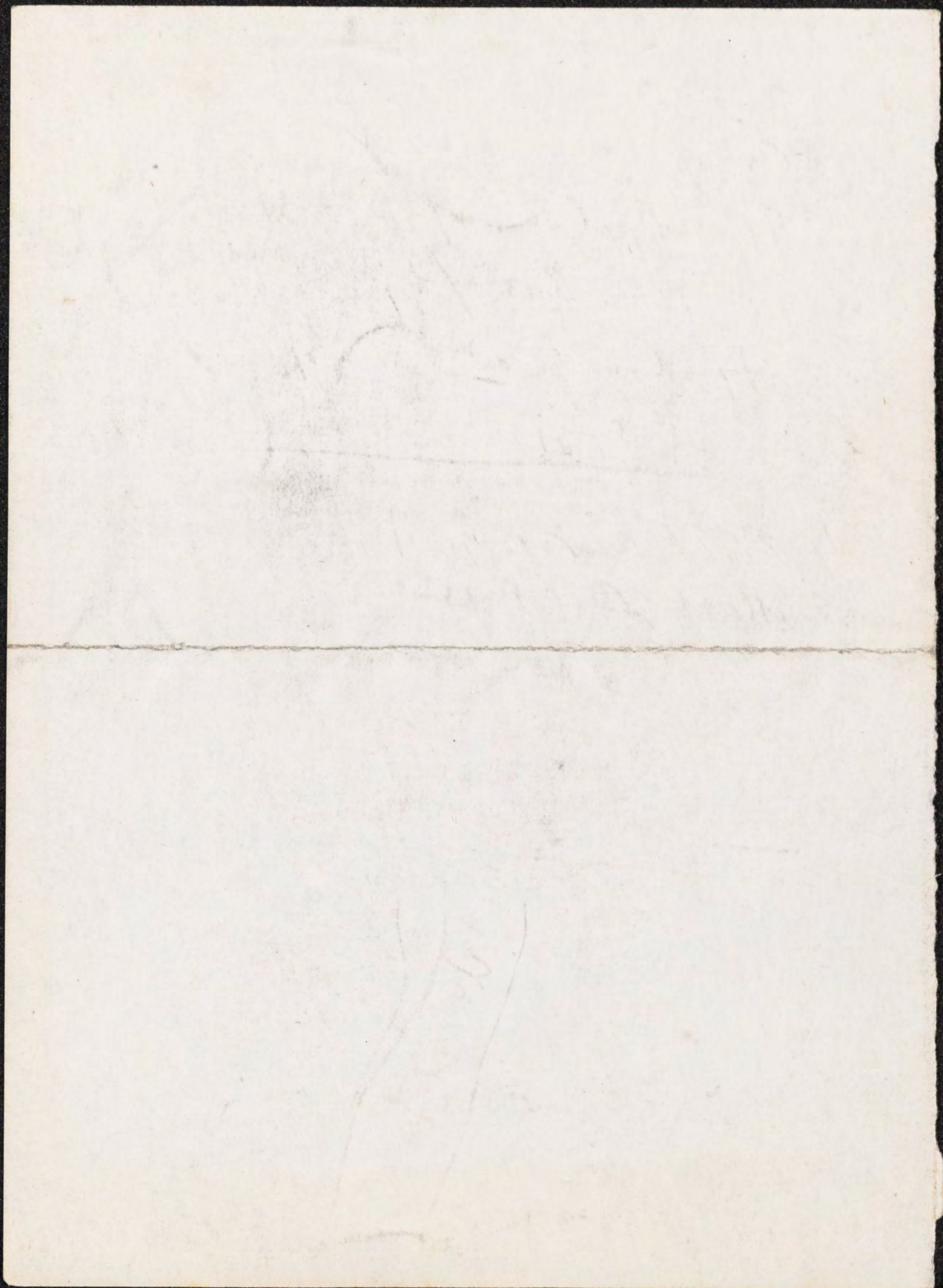
Diphtheria — Chol. Infant. — Meningitis

R Ar. sp Ammon. gr. XXV
 Tract. Op. Camph ʒss — ʒi
 Syr Rhei Ar. ʒi
 Ag. Cin ad ʒij M
 S. ʒi

R Plumh. Acetat. gr. ij
 Morph. Acetat. gr. ss
 Mucil. acar. st
 Ag. Cinim. ad ʒi M

S. ʒss

R Pot. Chlorat ʒij
 T. Kani. chl. ʒi
 Glyc. st
 Ag. Menth ʒss ʒij
 S. ʒi
 gr. ʒij
 in Chol. Infant.
 30. ʒss
 Mucil. ʒss



Catarrh - Bronchitis - &c are
not at all common in first 6 months
Capillary bronch. Dangerous -

Broncho-pneumonia common;

yet phthisis compar. rare.

Pneumonia. ^{more deaths in England than any disease of children} rough blowing resp. early;
in N. Y. and Phila. next after Chol. Infantum
all stages may coexist; greater

frequency of abscess & gangrene. ^{so.}
Do most, doubtless most frequent; others, less
✓ Pleurisy ^{mostly pleuro-pneumonia} - bronch. resp. early; friction
sound late; vomit & diarrhoea. (Tapping)

Phthisis: freq. latent early; haemopt. rare,
no expector.; little collig. sweat; ^{friction}
Obscure of phys. signs; predominant
symptom of broncho-pneumonia: (Crackles)

The corner-stone of a new College Building will be laid at the corner of North College Avenue and Twenty-First Street, Thursday, October 1st, 4 P. M., at the conclusion of Prof. Isaac Comly's General Introductory to the Twenty-Fifth Course of Lectures.

You are cordially invited to be present.

Edward Lewis,

Chairman of Building Committee.

Sep. 25th, 1874.

Stomatitis
Simple orythmatos — ulcerata — gangrenosa

Aphthae, venenatae

Thrush, and like eschara, parasites, Oridium
green and stools in bad cases

For simple stomatitis, ice, gum water, glycerin,
borax, dilute alum water.

Ulcerata, — chlor. pot. & prep. chalk (gum arabic)
glycerin & chalk — Sulph. copper — sulph. Zinc &c.
Eschara — strong astringents &
antiseptics

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Sep. 25th, 1874.

For chronic costiveness:

(2)

R Resin of Podophyllum 2 gr.

M. Ext. of Rhubarb & M. Ext. Senna an ℥j

Syrup of Ginger ℥ss

Oil of Cloves 4 drops

Mucilage of Gum Arabic

enough to make in all ℥iv

Dose for a child, 10 drops to a teaspoonful.

(1)

Diphtheria in Philada. from 1856: on Mortality lists, 1860;
then 307 deaths recorded — besides the usual number of
deaths (206 & 353) Scarlatina & Croup.

about ~~British & American~~ ^{quite a tracheotomy} cases — France 1 in 4 —
England 1 success in 3 tracheotomy cases — ~~Trousseau~~ ^{Trousseau} ~~1 cure~~ ^{4 cures} 4!

N. Y. Philada. between 1 in 4 & 1 in 5
(operating always late) — anæsthesia?

Durham's double canula good — Parovest leader wire instead.
9/40 of inch for 1 & 4 yrs — 11/40 between 5 & 8 — 12/40 from 9 to 12 yrs: marsh Take care
Belm Cicord, cut through 2 or 3 rings of trachea — of veins —
Sawse over opening of trachea after operation —
warm moist atmosphere afterwards — Feed carefully & well
atomize warm lime water into canula — ~~ice cream~~ ^{brandy & enemata} —
under a week, gradually, — Can't remove it usually,

(if frozen by essence of tea)

Bank \$50. { 50
50 } 120

Express Encen

Books

Emmie

Joe

Anna

A great deal of discoveries in

Rational Medicine & Surgery

Jenner's

1. Vaccination

unknown - Countries of Cincha

2. Use of Cincho

in Periodical Febrile Fevers

3. ~~Physic~~ Anesthesia in Surgery

Lagunes

4. Auscultation in Medical Diagnosis

For constipation (obstin. habit) in childhood:

Resin of Podophyllum, 2 grains; R. Extr. of Rhub. & R. Extr. of Senna, each a fl. ounce; Oil of Cloves, 2 drops; Syrup of Ginger $\frac{1}{2}$ fl. ounce; Mucil. of Gum Arabic, q.s. ut fr. β 3iv. S. 10 drops to a teaspoonful.

For frequent colic: Carminative

Bicarb. Soda, $\frac{1}{2}$ drachm; Aromat. Sp. Ammon. $\frac{1}{2}$ fl. dr.; Sol. Morphia, $\frac{1}{2}$ fl. dr.; Syr. Emier, $\frac{1}{2}$ fl. ounce; Camph. water, q.s. ut fr. β 3ij. Mix. Dose a teaspoonful, repeating if needful.

Skin diseases of Children:

Strophulus ^{Powder} - Glycerin Rosin - Brack. Soda & Flaxseed tea -
Roskela - Magnesia & light diet - in doors - starch-powder -
Urticaria - Magnesia & charcoal or citr. magnes. - or 5% zinc ointment -
Eczema - 1st vesic. - 2nd pust. - 3rd Scabbing: ~~clothing~~ diet, (as above) - Arsenic -
Impetigo - Vin. Colchic & Vin. Ipecac. - Flaxseed tea & Soda -
Herpes - Calomel ointment - Camphor ointment - Magnesia - &c -
Tinea Circinata - Tar ointment - Mercur. ointment - Corros. subl. wash -
Tavus - Poulter - depilation ^{Soap & water} - Tar ointment - Mercur. ointment - &c -
Psoiriasis - Arsenic - Iodide Potassium - Flaxseed & Soda baths -
& Syphilida - ^{acetic acid} Mercurials internally - Iod. Potassium.

Scabies

Syphilida

Scrofula -

~~High Disease~~

Applications in Skin Diseases,
Emollient: in children:

starch or arrowroot powder
 magnesia - finely powdered chalk
 Cinnamon oil
 glycerin & water or rosewater
 glyceramyl - glycerites / zinc
 Oxide of Zinc (not too thick)
 Chalk & Krameria pack 3℥ starch 3℥
 Vinegar & water
 Decoc. of bran - Flaxseed & Soda
 weak lead water -
~~Sassafras & water~~
 Castile soap & water

Alterative:

Tar ointment - mercurial ointment
 Calomel & Camphor ointment
 Oint. of Sulph. 3℥ potassum 3℥ in oil
 " of carb. potassum 3℥, then 3℥
 Lot. of Conva. sublin (2 grs. in 1 oz
 Ointment of lead (haluke)
 Carbolic acid lot. or ointment
 Juniper soap 10 grs in oil, 10 grs in oil
 Blister: of each equal parts

Arsenic, Mercuric, Sod. Potass.

AMERICAN PHILOSOPHICAL SOCIETY.

*The Annual Election of Officers will be held between the hours of 2 and
5 o'clock, P. M.*

FRIDAY, JANUARY 5TH, 1872.

Stated Meeting will be at 7 o'clock, P. M.

(Chair taken at 8 o'clock.)

*Mr. Price will read a paper on some Phases of Modern Philosophy.
Election of Officers reported. Librarian Nominated,*

Croup & Diphtheria.

(2)

Non-identity:

& Germany,

Virchow, Niemeyer, Oppolzer, Vogel,
Hassenslein, ^{Letzgerich &} Certel; Chas. West,
Hogg the microscopist, and, until
late, Sir W. Jenner, in England;
G. B. Wood, Austin Flint, J. Lewis Smith,
Fordyce Barker, Solis Cohen, and
W. Pepper (Dermey's associate in his work)
in this country.

Identity:

Betonneau in France;

Sir Thos. Watson, George Johnson,
Hillier, Morrell Mackenzie, &

now, though doubtfully, Sir W. Jenner;
or ^{in this country} J. R. Alleys.
The last is the nearest opinion; which,
for some, is enough to decide the question.

(1)
Anginose or Suffocative
Affections in Children.

Thymic Asthma.

Retropharyngeal Abscess.

(Tonsillitis)
Laryngismus Stridulus.

Spasmodic Night Cough.

Croupal Catarrh.

Inflammatory Membranous Croup.

Croupal Diphtheria.

weighed over twenty pounds. One hour and fifty minutes, including anæsthesia and dressing the patient, was consumed in the operation. Pulse 106, temperature 98° in axilla, immediately before the operation. Drainage in first twenty-four hours, two ounces of bloody serum, none subsequently. The pulse never rose above ninety-eight, temperature $99\frac{1}{2}^{\circ}$ in mouth. On the 5th, or second day, there was slight tympanites and tenderness, which entirely subsided on the 7th, or fourth day. Ten sutures were removed on the 10th, also the silver tube. On the 14th, or eleventh day, the drainage tube was removed; 19th, or sixteenth day, the pedicle came away; 20th, an enema, followed by an evacuation; 24th, or twenty-first day, patient sitting up, a small superficial ulcer at lower segment of wound.

The special points of interest in this case, are, 1st, one of the oldest recorded; 2d, the rapidity of the development of the cyst, which is multilocular, but only one having attained any size.

TRACHEOTOMY IN DIPHTHERIA, IN A BOY TWO YEARS ELEVEN MONTHS, WITH RECOVERY.

DR. CHARLES A. LEALE presented two pieces of diphtheritic membrane, each over two inches in length, which he had removed from the opening in the trachea, on March 22, 1876. The child had adenitis, œdematous face and neck, was cyanotic, and suffocating from the accumulations of exudations in the larynx and trachea, when Dr. Leale made an opening as low as the upper border of the manubrium, while the child was additionally rendered insensible by sulphuric ether. No vomiting followed, no blood-vessels were ligated, and only about 3 ij. of hemorrhage lost from the capillaries. It was nearly an hour before the tube could be safely inserted, in consequence of the large accumulation of muco-purulent matter and diphtheritic membrane, which he removed by the long elbow-forceps inserted through the wound, and while the child was held with head lower than body to facilitate the removal of matter, by sponging the parts immediately after an expiration, and before it could be drawn in by returning inspiration. In two hours after the operation the child breathed comfortably, and the skin was less cyanotic; he was placed on his side, and inhaled steam; and Dr. J. Lewis Smith in consultation saw him. At 12 P.M. Dr. Leale examined a piece of the freshly thrown off membrane, and found it alive with cocco-bacteria. First day after operation, child breathed easily through the tube; the inner one removed every half hour to be cleansed—it frequently containing large pieces of the diphtheritic membrane. During a forcible paroxysm of coughing, a piece was thrown through tube a distance of ten feet. Second day, pulse 120, R. 35, no air could pass through the larynx, and the endeavor increased the painful breathing to an alarming degree. Third day, P. 135, R. 35, T. 105° ; profuse expectoration through tube, and frequently clots of blood. Urine examined within quarter of an hour after being voided, contained $\frac{1}{2}$ albumen, epithelial casts, and an abundance of living bacteria. Seven P.M. P. 144, R. 62, T. 106° ; increased evidences of septic poisoning. Nine P.M., P. 135, R. 60, T. 105° ; erosions around wound, and from pressure of tube, caused 1 oz. hemorrhage; and, in consequence, the tube was permanently removed; has very painful cough, and profuse expectoration of thick diphtheritic membrane from the small bronchial tubes.

4th day: P. 150, R. 60, T. 105° ; entire surface of body covered with herpes, profuse diarrhœa, very light in color, and containing large quantities of mucous and diphtheritic membrane, showing that the disease had extended to the stomach.

5th day: P. 130, R. 28, T. $102\frac{1}{2}^{\circ}$; wound in neck

covered with diphtheritic exudation, which re-forms as soon as removed by suppuration.

6th day: P. 140, R. 62, T. $105\frac{1}{2}^{\circ}$; cannot breathe through the larynx; two small deep-seated abscesses opened beneath the fascia at wound, discharging about $\frac{1}{2}$ oz. pus; child exceeding fretful; passage of air over denuded bronchial membrane very painful; parts cleaned by frequent sponging after expirations, wound contracting, and child becoming cyanotic in consequence. With the elbow-forceps passed a small piece of sponge rapidly two inches through the opening, at moment of inspiration, and with forceps dilated the tracheal opening with beneficial effect; and concluded, if no improvement followed, to reinsert the tube.

7th day, by cleansing the wound to keep it open, and with partial removal of occlusions above, by coughing, could breathe better. There is complete aphonia.

From 7th to 11th day after the operation, the pulse, temperature, and respirations at many times were alarming; and apparent death impending. After the 11th day, convalescence fairly commenced and rapidly progressed until April 13th, twenty-two days after the operation, when he went to Dr. Leale's office. The opening had then completely closed, and the voice was almost entirely restored. His treatment from time of operation until recovery was without any medicine. Diet of milk, bread and water, and the inhalation of steam in a room, the temperature of which was kept at 98° Fah.

DR. MARY PUTNAM-JACOBI, in referring to the successful result of the operation in so young a child, asked the question if there were any similar cases on record of children under one year of age.

DR. BEVERLEY ROBINSON answered that Dr. J. Solis Cohen, in his late work "*On Croup and its Relations to Tracheotomy*," had reported several of such cases.

Dr. Robinson has since then sent the Secretary the following statistics from the work referred to:—

Age at Operation.	Operator.
6 weeks.....	Scoutetten (Strasbourg), 1840.
7 months.....	Bell (Edinburgh), 1861.
7 months.....	Lawson Tait (Birmingham).
10 months.....	Baizeau (Algiers).
10 months.....	Dujardin.
10 months.....	Bourdillat.
10 months.....	J. Cooper Forster.

The details of the first of the above cases (which are very remarkable), will be found in the *Am. Jour. Med. Sciences*, April, 1844, p. 466.

DR. MASON thought that the elbow-forceps spoken of by Dr. Leale was an invaluable instrument for the removal of phlegm from the trachea, and he was satisfied that he had by its use saved more than one child's life. The sudden plugging of the tube was an accident of such frequency, and so often resulted in death before the physician could be summoned, that his experience had almost persuaded him not to use a tube at all, but merely to make a free incision, keeping the lips of the wound open by strings passed behind the neck. The objection to the old form of tube was that, by unequal pressure at its curve, it produced ulceration.

DR. ROBINSON thought that this complication could be avoided by use of the tube bent at right angles.

In answer to a question regarding the laying open of the tracheal wound, Dr. Mason stated that such an operation had been performed abroad.

DR. BRIDGON added his testimony to the great value of the elbow-forceps in the prompt and efficient removal of clogging phlegm in the trachea, and referred to some cases in which it had proved the only means

of saving life. In one instance of tracheotomy for syphilitic disease of the larynx he was in the habit of cleaning out the trachea regularly with this instrument, sometimes inserting it as far down as the bifurcation, which latter, on more than one occasion, was grasped between the blades. In order to guard against the possibility of plugging of canula, he had made it a rule to have the inner tube removed every hour, washed and immersed in glycerine before it was reinserted. In regard to the propriety of the operation he had not the slightest doubt, and believed that it was not performed as often as it should be. He was of the opinion that the use of anæsthesia during the operation would explain a good many fatal results.

DR. MASON, in connection with the danger of sudden clogging of the tube, referred to a case of his in which tracheotomy was performed as a forlorn hope, and in which at the moment of its completion a plug of mucus was coughed into the tube, completely closing it and causing immediate death.

DR. BRIDDON presented the ankle-joint removed by amputation of the leg from a male patient of the Presbyterian Hospital. He then read the following history of the case as prepared by Dr. W. E. Forest, a member of the House Staff:

Terrence Reynolds, age 34, admitted February 23d. Three months ago the patient was pushed backward off a step, striking on the left foot and falling to the ground. Admitted to the hospital next day for fracture of the leg. The patient is a large man, of intemperate habits. Had syphilis fifteen years ago, followed by secondary and tertiary manifestations.

On examination the tibia was found to be fractured near the ankle, obliquely downwards and forward into the joint. The fibula fractured at the lower extremity as in Pott's fracture. The soft parts presented no appearance of injury except a *small superficial abrasion*, so small as almost to escape detection, opposite the lower end of the tibia. The syphilitic cachexia of patient was strongly marked, the integument over the tibia on the uninjured limb being purplish and scaly, and deformed by osteitis and periostitis.

Three days after admission the limb was put up in a plaster dressing. In a few days this was removed, when the small abrasion at the anterior and inner side of the ankle was found to have assumed the circular, worm-eaten appearance of a syphilitic ulcer. The plaster dressing was reapplied, a fenestra being cut in the dressing opposite the ulcer, and the patient put upon anti-syphilitic treatment.

From this time, March 1st, the ulcer steadily progressed, in spite of treatment, until it became nearly an inch in diameter, of a circular, perforating character.

March 27th.—The patient had a severe chill, followed by some prostration, during the past night. The discharge to-day is greater in amount, and movement of the foot forces out a thin, sanious pus. The chill, together with the character and manner of the discharge, indicates, it is thought, that the joint is penetrated.

March 29th.—The probe passes into the joint and comes in contact with carious bone. A small detached fragment of necrosed bone from the lower end of the tibia was removed. The surface of the ulcer has assumed a diphtheritic appearance.

April 2d.—An incision made in front of the external malleolus allowed a free discharge of pus. From this time on the discharge continued from both the openings into the joint; the lateral motion of the foot became more and more marked, and crepitus on movement of the foot was distinct; water injected into one opening passed freely through the

joint and out at the other opening. Thus a simple abrasion of the skin had become a penetrating ulcer of the ankle-joint, due to the syphilitic cachexia of the patient.

May 5th.—The condition of the joint has not greatly changed. The blackened and necrosed end of the tibia is visible through the inner opening, and caries of the astragalus can be detected by manipulation. The integument of the whole lower third of the leg has assumed an unhealthy, brawny, inflamed appearance.

May 11th.—Amputation having been decided upon, the operation was made at the junction of the upper and middle thirds of the leg, by the lateral skin flaps and circular through the muscles. A small quantity of blood was lost and the patient made an excellent recovery from the immediate effects of the operation. The examination of the amputated part showed the periosteum covering the lower end of tibia to be thickened and inflamed. The posterior half of the articular surface of the bone was split off, together with the posterior two inches of the lower end of the bone. The anterior portion of the articular surface and the anterior portion of the bone at its lower end was dead and blackened, but no well-marked line of demarcation had formed. The posterior portion of the lower end of fibula fractured off and displaced. The astragalus was extensively ulcerated and eroded on its upper surface. The remaining bones of the foot healthy.

Correspondence.

THE THEORY OF ANIMAL HEAT.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—Allow me to intrude upon your space in order to speak of some theories advanced by Dr. Gray, of West Meriden, Conn., in his article on "Animal Heat, and its Reduction by the use of Gelsemium."

I shall not at all refer to his discovery of the febrifuge quality of the herb spoken of, although I am quite a sceptic from the experience I have had. For in my own experience, as well as in that of several colleagues, I have seen the much-vaunted febrifuges, such as quinia, salicylic acid, as well as salicylate of soda, prove utterly unable to control a high febrile state in many cases. In others their administration has been followed by a reduction—in some cases a marked one—and there the golden rule, "*Post hoc ergo propter hoc*," has, of course, been applied.

Notwithstanding, I shall try the gelsemium as faithfully as I have tried the others, and I am really sorry that for that reason Dr. Gray's paper has come only now to my notice.

The only reliable and never-failing method has been, at my hands, that of Ziemssen—lukewarm baths, gradually reduced to a cold temperature. In pneumonia, of children especially, if combined with one or two doses of quinine—given more as a tonic than as a febrifuge—they are invaluable.

Be that as it may, however, the point I wish to make is one that has a wider application: I propose to speak of Dr. Gray's "*full and rational theory of heat*," which he gives in the following words:

"An increase or diminution of the activity of the vital functions is accompanied by a corresponding rise or fall of the temperature of the body."

I shall not ask Dr. Gray how he reconciles that clini-

On Diphtheria and its Relations to (so-called) Croup.

Dr. R. H. SEMPLE read, before the Royal Medical and Chirurgical Society (*British Med. Journal*, Nov. 13, 1875), a learned paper with this title, in which, while by no means alleging that croup and diphtheria were synonymous words, he maintained that the term "croup," as generally employed, comprised at least three very different affections; namely—1. Laryngismus stridulus; 2. Infantile laryngitis; and 3. Tracheal (or rather laryngo-tracheal) diphtheria.

In the discussion which followed, Dr. WEST said that, however interesting researches into antiquity might be, he doubted whether they could settle the matter. The old writers, indeed, described accurately what they saw; but they did not give the minute details now regarded as necessary for settling diagnosis. They were like the old anatomists, who described the aorta and vena cava as they saw them accurately enough, but were unacquainted with points known at the present day. In the present day, paralysis was regarded as one of the distinguishing characters of diphtheria; but, in spite of his care in observation, Bretonneau did not seem to have noticed it. Some years ago, at the Children's Infirmary in Lambeth, Dr. West met with cases which must have been diphtheria; but he had no note of subsequent paralysis. Dr. Cheyne, an accurate observer, had described croup, and had employed bleeding successfully in it; and in several cases Dr. West had opened the jugular vein in children with success. These cases, setting in with more or less of catarrhal symptoms, cough, difficult breathing, etc., were distinct from what was called diphtheria, where there was, perhaps, no febrile movement, but extreme depression, and in most cases distress about the larynx. In such cases, bleeding would destroy the patient's life. He asked whether these were one or two diseases—whether it was to be considered that croup and diphtheria were allied to each other, being different manifestations of the same disease, and not more different from each other than the mild and the severe forms of scarlet fever. He had hitherto believed that the two diseases were distinct; that one was a local inflammation, and the other a blood disease. He still held the same opinion; but his belief was becoming less positive in consequence of the increasing evidence on the other side. The question could scarcely be settled satisfactorily by individual observation; and he would suggest the appointment of a committee of the Society to investigate the subject. The questions to which answers were required were: Do croup and diphtheria prevail epidemically at the same time and in the same locality? Does croup (without albuminuria or paralysis) observe a different rule from diphtheria as to epidemic prevalence? Are cases of the two diseases met with in the same family at the same time? Is the croup of Cheyne accompanied by albuminuria? Are both diseases followed by disorder of the nervous system?

Sir WILLIAM JENNER had till recently held that true membranous croup and diphtheria were distinct diseases, and had strongly expressed the opinion. Larger experience, among the poor as well as among the rich, had made him alter his views; and he now regarded the evidence as all but conclusive on the other side. But still he was not quite sure on the subject. The grounds of his change of opinion were the following: He had seen in cases of croup, albuminuria, which was said to be peculiar to diphtheria. He had also met with a case in which a surgeon had a laryngeal membranous deposit in consequence of the discharge from a diphtheritic patient. Again, he could not allow the idea of a sthenic and an asthenic condition to stand in the way of the identity of the diseases. He thought that Dr. Cheyne had confounded catarrhal laryngitis with croup. In 1817 and 1818, relapsing fever was described by Cheyne and others as typhus; they bled successfully, and the patients recovered, and the conclusion was arrived at that bleeding was the remedy for typhus. He had seen one case of true croup followed by nervous symptoms; and one of apparently true diphtheria coming on after exposure to cold.

Dr. DICKINSON had seen a large number of cases of croup and diphtheria at the Children's Hospital; and he agreed that the last word had not been spoken on the subject. He thought that the view of the identity of the two diseases

amounted to nothing less than recognizing one cause for all membranous exudations on the larynx. If two causes were acknowledged, one a poison and the other cold, it was easily seen how one class of cases tended to prostration and the other to the formation of a limited false membrane. He held to the old view, that croup and diphtheria were essentially distinct. Dr. Semple said that he had spent much time in investigating the subject, and he was pleased to find that authorities of high influence held views similar to his. He had long entertained the opinion that membranous croup and diphtheria were synonymous. Croup was an old Scotch word, merely indicating difficulty of breathing from some cause. No particular signification could be attributed to it. But diphtheria was an entity. Commencing on the fauces and tonsils, it might, and often did, spread into the larynx and trachea; and, when it did so, it was the same disease as that called membranous croup. He had expected more opposition to his views than had been expressed in the discussion. Dr. West, instead of opposing, had confirmed them. He had studied Cheyne's writings, and found that that physician had evidently confounded infantile laryngitis with pseudo-membranous croup. The French writers did exactly the same thing, until Bretonneau clearly distinguished the disease diphtheria. Again, in the early appearance of diphtheria in this country, many disorders were described as diphtheritic which were really not so. In concluding, he said that, while diphtheria was the same thing as so-called membranous croup, it by no means followed that croup always meant the same thing as diphtheria.

On the Treatment of Whooping-Cough by Carbolic Acid.

L'Union Médicale (No. 91), for August 3, 1875, contains a letter from Dr. DOMINGOS CARLOS (of Bahia), stating that whooping-cough is often frequent and severe in the West Indies. The epidemics are chiefly in autumn, and adults not seldom suffer. He has long suspected that the sporules of some fungus were the cause of the disease. On this theory he began in May, 1874, to make trials of carbolic acid. He chose an obstinate case, a child of two years old, whose cough had resisted all common means of treatment. The following formula was employed: R. Crystallized carbolic acid, 25 centigrammes; concentrated orange-flower water, 5 grammes; gum julep, 50 grammes. To take four to six teaspoonfuls daily. [This is about equal to crystallized carbolic acid, four grains, concentrated orange-flower water 3jss, mucilage to 3ij.] The improvement in three days' time was most marvellous, and Dr. Carlos's subsequent success has induced his colleagues to use the same remedy. [Without dogmatizing on the cause of whooping-cough, Mr. W. Bathurst Woodman thinks it noteworthy that in all the cases at the Northeastern Children's Hospital, in which he has examined with the microscope the viscid mucus coughed or vomited up by children with this disease, and these amount to some dozens, he has found not only bacteria and bacteroids, but also sporules and mycelium, much resembling those of the *Oidium albicans*, with finer ones like the *Leptothrix buccalis*. The successful use of alum may also be explained on a similar theory.]—*London Med. Record*, Nov. 15, 1875.

Lasègue on a New Form of Angina.

A midwife, aged sixty years, was admitted an in-patient of La Pitié, under the care of MM. Gombaud and Rigal. The case is reported in the *Gazette des Hôpitaux*, July 17. She stated that her health had always been good, except that twenty years ago, having burnt her finger, she delivered a young woman whom she believed to be free from venereal disease, but who was not so. Some days afterwards, her finger developed a sore with indurated edges, and she learnt from the young woman's doctor that he was attending her for syphilis. The glands in the axilla swelled, and some of the lymphatics were reddened. She took a little medicine, which she believed to be mercury. She never had any rash, nor any other venereal symptoms. Indeed, her health was quite good until six months ago, when she fell several times on the frozen pavements. From this time she was never well, her legs became feeble, and she was feverish

Ch. Inf. antum —

Treatment — Calomel — ~~Antidotes~~ — ~~iod.~~ — ~~br.~~ —

Syr. rhei ar. — Sp. ann. ar. — Liment —

Common water — Peruvian (logwood, guaiac, blacking) powder
chalk mixt? — enemata of starch & laudanum — acct. lead

Mut. sili^o (gr. 1/2) — creasote —

Diet — ice — ^{night} ~~amuse~~ ^{errors} milk — arrowroot —

panna — chills bath — frozen beef tea —

milk with whiskey — ^o ~~Comm.~~ ^{haz.} — raw beef soup —

Cool baths —

Eruptive Fevers

Sc. m.

Var.

Small

Pertussis

Respiratory affections —

Croup —

Digestive disorders —

Sore mouth — Ch. Inf. ant. — Colic

Mental affections —

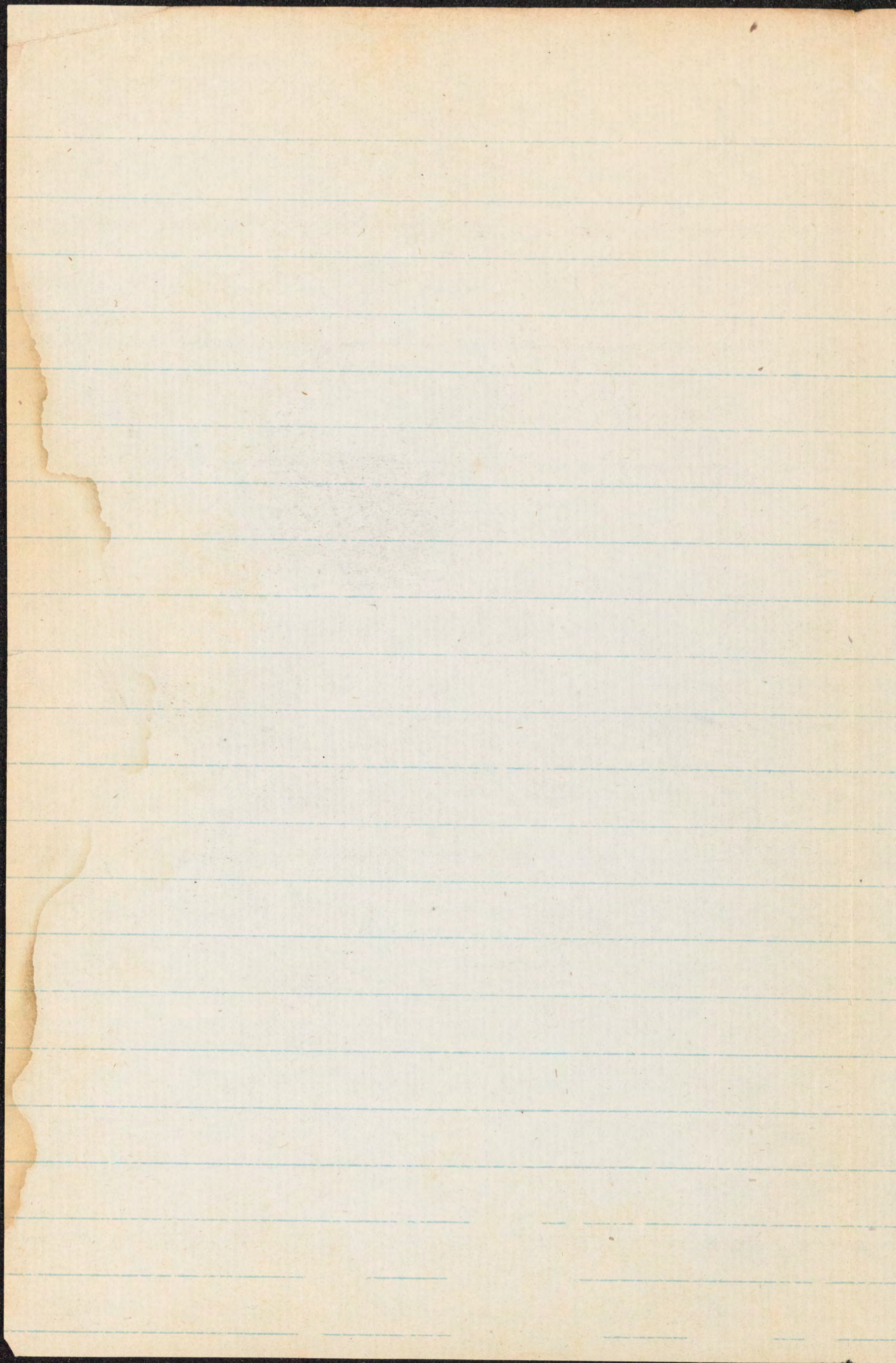
meningitis — Tetanus — Coma — Chorea

Skin diseases —

Skin powder

Hygiene of
The Sick Room

Hygiene of
Professional Life.



Hygienic Management of the

Sick-room. Very important, in treatment.
Good-nursing often makes half the battle with disease.

1. Light -

2. Sound -

3. Clothing -

4. Bed -

5. Food.

6. Mental management. //

Germs Vestiges of disease

Prevention of attacks of illness

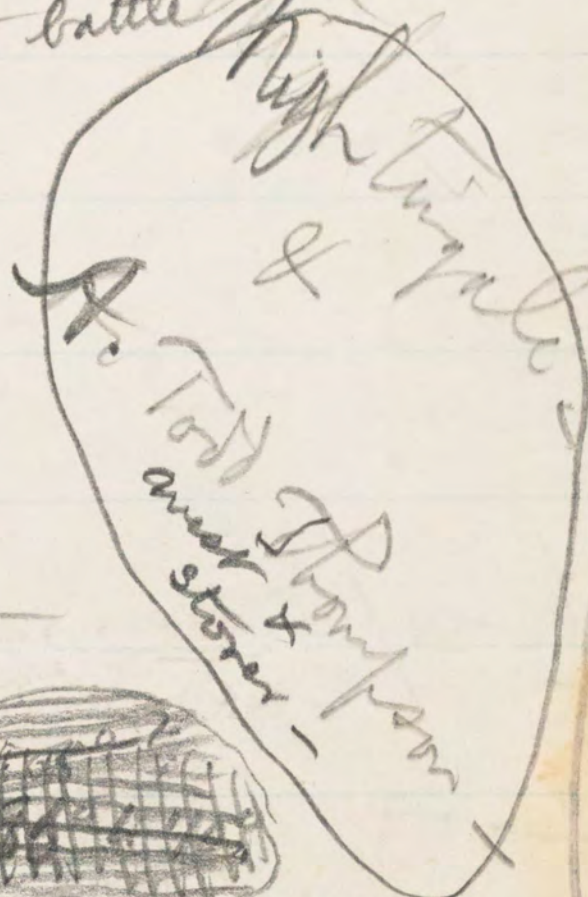
Early use of anticipatory remedies.

Adaptation of employment, to
condition of lungs & state of
health -

weak lungs -

irritable brain, &c. -

Renewal of life & Economy of vital forces



Practice of Medicine.

Theory and

to the Hygiene

Relation of

↑

Hygiene of the Physician's

Avocation —

Exposed most to — Loss of

Sleep —

Temperance — &

Temperance.

